THE

MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

VOL. XI. BALTIMORE, MAY, 1874. No. 5.

Agricultural Calendar.

FARM WORK FOR MAY.

The month of May is as pressing in its demands on the farmer as was April. He must be up and a doing with might and main; not only industrious in his physical labors, but he must do a good deal of brain work, if he expects to succeed. One good sober thinking mind is equal to half a dozen hands on a farm. We hope that the most of the corn crop has been planted and all the turf land, intended for crops this year, has been plowed, and well and deeply plowed, so that it will only require the use of the harrow to put it in prime order for the different crops as the time arrives for their being sown or planted.

CORN.

The corn crop is the most important object just now demanding the farmer's attention. If it was not planted last month, or a large portion of the crop, then it should be done at the earliest moment that the work can be performed properly. As to its mode of cultivation and other suggestions concerning this magnificent cereal, we refer you to our views expressed in the April work on page 99 of the *Maryland Farmer* for last month. If there be anything in statistics or the predictions of wise men, who have become by years of study familiar with the laws of trade, and the causes which lead to inflation and depression in prices of land products, then we must confidently believe, that for years yet, corn will command a fair living price, with a strong probability it will advance to very high prices, yielding large profits, if grown with that enlightened economy of labor which the progress of agriculture has vividly manifested, whenever the theory has been reduced to practice, of substituting manure and machinery for manual labor employed in the cultivation of extensive fields of poor land. It then becomes every one to aim at making an increased crop of corn, not by solely extending the corn area over that of last year but by thorough preparation of the land, heavy manuring and the best of cultivation during its growing to maturity. If these conditions can be complied with, then extend the length and breadth of your corn field as far as you may please to do, but not otherwise, lest you pursue a false theory which has heretofore, and must ever lead to ruin.

SWEET POTATOES.

From the first to the last of this month, and as late as the 20th of June, sweet potato slips may be planted in moist weather, or after a rain—from the 10th to the 15th of this month is, perhaps, the best time. The light soils are best suited to them. They are planted in hills, conical in shape, and 18 inches high, or on ridges, two feet apart, the ridges being three feet apart, the hills two by three feet. If the land be not fertile, put stable manure, a fork full where the hill is to be, and make the hill over it. If to be planted on the ridge plan, open a shallow furrow and put in the manure as usual with the Irish potato, then back two deep furrows over the manure, level the top with a rake or make a hard pat with the hoe every two feet on top of the ridge, and plant a slip which has attained a growth of five or six inches. In planting bury the slip to the first leaf. In ten days pare down the sides of the ridges or hills, loosen the soil about the plants and plow or shovel out the middles of the rows. Keep all clean from grass. As the vines run, now and then, with a stick turn them up, to prevent their taking root, for each joint will soon put out a rootlet and grow into a mass of stringy potatoes, unfit for use, if not prevented by this means. As soon as they nearly cover the hill, turn the vines on top of the ridges or hills, plow deep and well, with mould board next to the ridges or hills; then with the hoe give them a good hilling, and turn back the vines. In a week, run the cultivator down the middle of the rows, and the work is done, except occasionally loosening the vines on the sides of the ridges or hills to prevent rooting. They

will soon cover the whole ground and the few weeds which spring up can be hand-pulled. It is a crop, that is as easily grown as the Irish potato, more quickly and easily gathered, sells higher in market, pays better every way. Yields well, ordinarily from two hundred and fifty to four hundred bushels of marketable potatoes, leaving as many more, too small to sell or use, yet more valuable than half the amount of bushels of corn, for preparing hogs for the killing pen. They seem to make a hog grow and fatten at the same time. We consider them far more profitable than the Irish. They can be kept sound nearly all winter under a proper course of treatment, which is similar to the keeping of Irish potatoes in stoops.

Irish Potatoes.

Plant your potatoes now, on well pulverized soil which has been plowed deep and manured. Use fertilizers in the trenches and ashes and plaster on the top of the drills or hills. By early planting, if you grow for market, you will have them ready to come in when the South has exhausted her early crop, and before the north pours in the late crop. We cannot compete in earliness with the south, nor compare with the north in the product per acre, so we must plant with a view to bring our crop in the market at that interval of time when neither great rival is in the way.

Oats.

It is too late to sow oats now except with the intention of affording shade to the young clover except in low grounds which have heretofore been too wet to plow. Such places, drained and fertilized, will likely bring good crops though sown this late; but we think it too late to expect a good or tolerable crop from dry uplands.

Hogs.

Continue feeding them generously until the clover pasture is fit to be turned upon. Give the young pigs all the milk you can, and also corn meal or mill feed made into a swill with water, or what is better, scalded with hot water and suffered to cool to milk warmth. If possible, let them have access to the clover patch. By December next, pigs of improved breeds, now a week old, ought to weigh from two to two hundred and fifty pounds, or average one pound for every day they are old at the time they are killed, otherwise hog raising does not pay. This can only be done with good breeds and high, judicious feeding. The land pikes and briar-grubbers will never do it, if they were forced to consume half their weight daily in nutricious food. The common country hog is a Calvin Edson, and will live and die, a skeleton! He is a voracious feeder like all lean animals. He is restless, roguish and never content when not in mischief. He keeps his owner and his neighbors in a constant fretful excitement, and often ill-blood grows out of it, and this he does, though he knows his ears are to be bitten off by Tray and Touser, whom the boys and niggers delight to set upon him.

He destroys and consumes much more than would keep his aristocratic, high-bred brother in that state of luxurious quietude, in which it seems his nature to enjoy, whose whole aim of existence appears to be to eat and sleep and grow fat; too dignified to be a marauding rover, and too indolent to work for his grub. How it is our planters and farmers will keep these expensive, worrying pests on their farms, and not get improved breeds and pursue the improved system of swine breeding and keeping has always been a mystery to us.

Sheep.

Toward the close of the month if the weather be mild and clear, sheep may be sheared. For some weeks after being sheared, they should be sheltered during rains, or on the appearance of a storm.—The loss of their warm, thick coats, is very sensibly felt by this meek, uncomplaining animal, and the flockmaster should do all he can to ameliorate its condition and accustom it quickly to its nudity and ward off any bad consequences likely to result therefrom, by careful protection against sudden atmospheric changes.

Trees.

It is rather too late to plant deciduous or fruit trees, but is the best time to set out Evergreens. When planted, mulch heavily around them with leaves and straw on top of the leaves, and water late every evening until a fine rain falls. If during a drought they seem to fade, again use the watering pot until there comes a copious rain.

Manure and Plaster.

Continue to scrape up all the manure you can, and haul it out. Sow plaster, if not done before.

Roads.

Your farm roads and the public roads that pass through your farm, see that they are gone over and repaired, so as to continue in fair condition until a leisure time in summer will allow you to put them in such splendid trim, that you will call up the blush of shame on the cheek of your delinquent neighbor.

Roots.

Such root-crops as Parsnips, Carrots, Mangolds and sugar Beets, ought to be up and growing, but if not, it is not too late before the 10th instant to sow them, provided the ground is in prime order, and highly enriched. Soak the seed, and roll the drills after sowing the seed, with a hand roller, to confine the earth about the seeds and hasten thereby germination.

Clover.

Cut your clover as soon as it becomes generally in blossom. Put in small cocks, of one hundred pounds in the evening what was cut before four o'clock P. M.; cure it as much as possible in cock; it ruins clover hay to stir it much. In a few days it will be sufficiently cured to put in the rick or mow, if the weather be fair. After the dew is off, open all the cocks, and then haul to the barn or rick, sprinkling salt over every layer of a foot thickness, at the rate of half a bushel to the ton. It is a great preservative and imparts a flavor and relish to the hay which seems delectable to all stock. They eat salted hay with great appetite.

Tobacco.

See that the tobacco beds are kept clean, and the growth of the plant is encouraged by frequent moderate applications of stimulating manures and other plant-food. Have the ground prepared in ample time for the plants. This month, tobacco plants can be planted smaller and on lighter seasons than they can be next month. Once was the rule to plant none but large plants, and the maxim was "a week in the bed was worth three in the field," but our seasons are, now a days, so uncertain that, if the plants are small, have good roots, the land ready and the season fine, it is best to pl nt as early as possible so that there be a fair uniformity in the size of all the plants in each "cut" or portion of the ground planted. The land is cool and the sun is not as scorching as it soon will be, therefore the plantings of May are likely to stand well. Be sure to dress the land before scraping the hills, with five or six bushels of salt, so as to kill or drive away the cut-worm. It has been found to be efficacious and the theory seems sound. But if this should not be the result, it will prove a great help to the crop in forcing its growth.

Pumpkins.

This is pumpkin-planting month. Sometime during the month plant pumpkin seed among the corn. Put a seed or two in every third corn hill in every third row; if over the whole field, the better, but certainly in the low rich spots and in the other very rich places in the field, until you have planted as many seeds as are likely to furnish an ample supply of pumpkins for your stock.

Peanuts.

For the sake of the children, if not for the profits from their sale, cultivate a few rows of peanuts. They are as easily raised as beans and the culture much the same. A light sandy loam of medium fertility is best suited to them. Prepare the ground well, and throw up light ridges or open shallow drills, twenty-four to twenty-eight inches apart, and drop two nuts together, eighteen inches apart in the drill. Cover them, keep the land loose and clean. The nuts should be such as have not been kiln-dried, and must be shelled by hand carefully so as not to break the skin. In plowing, throw the earth upon the plants as they grow. When they blossom, stop the plow and weed by hand. They then strike into the ground to form their fruit. When ripe, plow on each side of the row and pull the vines with the nuts, by hand, and leave them for a few days to dry, when they can be separated from the vines and spread on the floor of an airy room until well dried, or may be kiln-dried. They are wholesome eaten raw, but considered more so and more palatable if roasted like chestnuts. They yield enormously and yield large profits per acre, where they are grown extensively as a market crop. It is the chief crop with many persons in the South and portions of Virginia, and money is made by growing them. They are always in demand.

THE PERFORATING POWER OF ROOTS.

It is indeed wonderful how easily the roots of plants and trees bore through hard, impacted soils in search of nourishment. They use for this purpose a sort of awl, of immense power, situated at the end of the root, and capable, with the aid of the other root machinery, of thrusting aside heavy weights and getting through almost any obstructions. Yet the awl consists only of a mass of microscopic absorbent cells formed by protoplasm or vegetable mucus—the fluid in which vital action is first set up. The roots of the elm and the maple will bore through the hardest soil of walks or streets, enter drains, twine about water pipes, and penetrate through the seams of stone and brick structures. The roots of some plants have been known to pass through 18 inches of solid brick-work and make their appearance in a wine-cellar below. Plants have a vast power in overcoming obstacles, when foraging for food. They are like a hungry animal which no fences can restrain when there is food beyond. The movements of roots in soils proceed on certain principles of utility in connection with the welfare of the plant. Some need much more moisture than others, and the roots will drive through rocks to obtain it; others need silicious food, and will penetrate through a clay bank to reach the desired foraging ground. The urgency with which nature drives plants and animals in pursuit of food is almost irresistible.—*Journal of Chemistry.*

Self Milking is prevented by a Chautauqua Co. farmer, by the application of pine tar to the teats a few times.

GARDEN WORK.

GARDEN WORK FOR MAY.

This is an interesting month for the gardener. The seeds are coming up each day, and the plants are growing—the strawberries are swelling out to their full size and some may be showing color, indicative of ripening. Cherries are ripe, and smaller fruits large enough to make tarts and pies;—asparagus is plenty, with spinach, cabbage sprouts, young onions, radishes, lettuce, and toward the close of the month peas, beans and beets and potatoes ought to be abundant in every garden in this section, which claims to have a gardener or head director, whether male or female, and if it has not these things, so that by the first day of June, it can produce at least six nice kinds of fresh vegetables, grown in the garden this season, with ripe strawberries and cherries, besides pie fruits, such as rhubarb, apricots, gooseberries and currants, it cannot be called a garden—only a late, half attended truck-patch. Much work must necessarily be done this month—some of which we will recapitulate.

Cabbage, Cauliflower and Brocoli.—Set out cabbage plants, cauliflower and brocoli. By the 10th, mak a rich well prepared bed and sow seeds of each for July planting of the winter crops. We find more satisfaction fron the drumhead Savoy and the flat Dutch varieties than from any others, although we have tried nearly all the sorts offered of late years by seedsmen. The red Cabbage ought to be cultivated for pickling. It makes a nice pickle.

Peppers.—Set the pepper plants out two and a half feet by 18 inches in moist rich earth, if to be had, if not, use manure and water freely in a dry season. If you have neglected to have the plants ready now, you can sow the seed, if immediately, and they may come in time for pickling and making mangoes, but not be likely to ripen.

Cucumbers.—Plant these 3 by 4 feet in low hills. It is said they bear better, and the fruit is better in size, shape and quality, if they are grown on a trellise like a grape vine. Those who have tried it say that it economizes space very much, and that the vines bear better and longer than on the ground. It would be well worth one's trouble to make a trellise of lattice work, made cheaply of common laths, and try it. The experiment would cost very little time, material or labor. Cucumbers should not be planted near melons or squashes.

Celery.—This delicious and valuable plant can be planted, and ought to be, from now until first of August. But May is a good time for the early crop and July for the late crop. It can be raised with not much trouble, unless the season be very dry and much watering is required. Dig trenches 4 feet apart, 1 foot deep, and spade wide, the bottom of the trench dig up and cover an inch or two with well rotted stable manure, or barn yard manure; sprinkle with salt and chop it and intermix well with the soil in the bottom of the trench, and let it remain a week before setting the plants. After a rain, draw your plants, trim the roots and broken and decayed leaves, cut the top off nearly half the length of the stem and plant in trenches six inches between the plants, water freely, cover the trenches with bushes for a few days from the sun; water every evening until they start to grow. Keep the earth loose about the roots and shave in the sides of the trenches as the plants grow, taking care not to fill in as high as the top of the crown of the plant. Never let it suffer for moisture. Sometimes use liquid manure in the trenches, not on the plants, the same also with water made brackish with salt. It is a plant native to sea-coasts. An acre in good celery is worth usually $1000.

This plant should be grown by everybody, more extensively, because, everybody likes it and it sells high, and it is very valuable for its medical curative qualities. Those who habitually use it, fully appreciate its virtues, one of whom, who is reliable, thus speaks of its great value as a recuperator of health:—

"I have known many men, and women, too, who from various causes had become so much affected by nervousness that when they stretched out their hands they shook like aspen leaves on windy days, and by a moderate daily use of the blanched footstalks of celery as a salad they became as strong and steady in limb as other people. I have known others so nervous that the least annoyance put them in a state of agitation and they were in almost constant perplexity and fear, who were also effectually cured by a moderate daily use of blanched celery as a salad at meal time. I have known others cured of palpitation of the heart. Everybody engaged in labor weakening to the nerves should use celery daily in season, and onions in its stead when not in season."

Dr. C. W. Benson, of Baltimore, has also discovered that the extract of Celery and Chamemile, combined in a certain proportion, not only cures nervousness but head-ache, either bilious, dyspeptic, nervous or sick head-ache. There is no question as to its efficacy in relieving nervous complaints in their various forms; Dr. Hall uses it successfully in kidney affections, and certainly no pleasanter remedy can be found in the whole Pharmacopia of Medical Science.

Peas and Bush Beans.—Continue to sow a few rows of these, every ten days, to keep up a succession until corn, tomatoes and other vegetables are ready to take their places.

Beets and Salsify.—Toward the end of the month sow Salsify and the long red Beet for late fall and winter use. Carrots and Parsnips may also be sown now, but it is rather late for them.

Beans and Peas.—Sow a few rows of snap-beans and late peas at intervals of ten days, to keep up a succession of supply.

Corn.—Plant more early Corn, the large white sorts are best at this time to plant, yielding during August and September a good crop of ears for boiling or roasting.

Tomatoes and Egg Plants.—Set these out by the side of trellises, or as they grow support them with brush. In planting, open holes three and a-half feet apart, put in a fork full of half decomposed stable manure over this, draw the top soil, raising a hill about two inches high. Use plaster and ashes freely about the plants. Set out Egg Plants in the same manner.

Squash or Symblin.— Plant these, but not in proximity to pumpkins, winter squash or other sorts of cucurbitaceous plants.

Radishes.—Continue to sow Radish seed weekly in small beds to keep always on hand a supply of quickly grown, firm, crisp specimens of this pleasant appetiser.

Lettuce.—Sow some of the large India Lettuce, it stands the heat well. The Cos Lettuce is excellent for summer. Tie up the heads to bleach a week or ten days before cutting. Lettuce requires a rich soil, frequent work and water in dry weather, to have it well soaked and tender.

Okra.—Plant a few rows of Okra. It is wholesome and makes a superior addition to all meat soups and vegetable soups. It is used green, or in the dried state in winter. Some prefer gathering the tender pods and keeping them in strong brine as the cucumber and other pickles are kept until wanted for use. They are then taken out and soaked in water a few hours to extract the salt, before being cut up and put in the soup.

Endives and Spinach.—Prepare a bed for each, and see that it be made rich, as Spinach and Endive both require rich, well pulverized soil. Sow in drills eighteen inches apart, and, as they grow, thin out to eight inches between the plants.

Watermelons and Canteloups.—Plant these at the earliest moment, in accordance with our suggestions in the April number of the *Maryland Farmer.* Besides the two standards recommended therein, we have a lately introduced Watermelon, called the Rusian American, a hybrid between the Mountain Sweet and the Persian, brought over by the celebrated traveller Bayard Taylor, who has industriously and intelligently added many valuable foreign vegetables and plants to our horticulture. This hybrid, Mr. Taylor raised and it is declared to be unsurpassed for size, delicious crispness of flesh, and sweetness of flavor. It ripens about three weeks later than American varieties, hence it prolongs the melon season—a great consideration to the amateur as well as to the market gardener. *Citron*—plant a few hills for preserving; also plant some of the *apple-pie* melon, from Japan. It keeps till May—stewed and baked in pies, is a capital substitute for apples. We have grown it, used it, and found it very good.

Martynia.—Plant a few hills of this for pickling. It is greatly fancied by some as sweet pickle.

Lima and other Pole Beans.—Plant these, as heretofore directed in our hints about gardening. The Lima ought to be planted largely, as it is a delicious summer vegetable, and the dried ones, soaked a few hours before cooking in winter, are nearly as good as in their green state.

Grapes and Dwarf Trees.—Rub off all unnecessary buds, and pinch the ends of shoots of the vine growing too rampant. The same with the branches of dwarf trees that if left, will disfigure the shape of the trees.

General Remarks.—Eradicate all grass and weeds, and never let a blade of either be seen higher than an inch or two, and never many of them. This can be easily accomplished by dispensing with the old-fashioned hoe and using the iron rake, Dutch scuffling hoe, or the improved *Warren* hoe. By frequent use of the rake and those implements, so as never to permit the grass to get ahead, twice as much ground can be effectually stirred and grass destroyed as if left until it has to be hoed with the weeding hoe, and then raked. The garden fork is in most cases better than the spade for turning up the ground, and altogether is a much more useful implement in the garden than the spade, yet it is rarely seen in our country gardens. Water the plants freely during the dry spells, and do this work very late in the evening. It is better to give a good watering every third evening than a light sprinkle each evening. Thus only one-third of the garden would be watered each day.

HEN MANURE FOR ONIONS.—The *Germantown Telegraph* says:—Hen manure, where only a small quantity is gathered, is better adapted to the growing of onions than anything we ever tried. Although a very powerful manure, we have dosed our onion beds liberally, and we never saw any but the best results. When large quantities are saved, it should be made fine, mixed with two or three times its bulk of gypsum, and applied to the corn hills at planting time.

THE VALUE OF THE GRASS CROP.

The Philadelphia *Ledger*, a journal both careful and cautious in its statements, shows in the following article the great importance of the grass or hay crop to the entire country. It thus speaks of what it calls "the greatest of the crops:"

"A very interesting industrial problem is under discussion in some of the newspapers, growing out of the following qnery: "Which of the earth's products employs the greatest amount of capital?" It is a problem requiring considerable research for even an approximate solution, and the ablest of the editors who have thus far entered on the inquiry, treat it with a good deal of caution. The New-York *Journal of Commerce* thinks the inquiry might be limited to three products—hay, cotton and tea. If this be so, (though we do not agree to the limitation to the three products named,) we think there can be but little difficulty in demonstrating that 'hay' or rather grass, is the most important, and in all probability employs most capital.

In order to contribute the *Ledger's* share to the investigation of so interesting a subject, we present the following suggestions and figures, so that those who have leisure and taste for the inquiry may follow them out, or present something better. In the first place it is to be borne in mind that the cotton and tea crops, although large, and one of them of the highest importance, are, in one sense, local, as they are limited to a few countries, while the hay or grass crop is universal. Taking the whole world the last must by far outweigh the other two. Next, let us examine the figures of the recent census of the United States as to the capital employed in agriculture and try to eliminate, in a rough way, what portion of it is devoted to the grass and hay crop. If we can arrive at a rough estimate of it for our own country, it will hold tolerably well for most other countries. The aggregate reported value of the farms of the United States in 1870 was $9,262,803,861; the value of all live stock, horses, cattle, sheep, swine, &c., on farms, $1,525,276,457; the value of all farm-implement, $336,878,429; the amount annually paid in wages, $310,286,285; and the aggregate of all, $11,435,244,231.

This represents, approximately, the amount of capital employed in agriculture in the United States. How much of it is devoted to the hay crop? Let us see if we can make a rational guess at it by the following method: First, by taking the whole value of the agricultural products of 1870, and then tracing out after a fashion the grass and hay crops and their products, and thus get at the proportion of capital devoted to the grass crop. The aggregate reported value of all farm products for 1870 was $2,447,538,658; but as this includes additions to stock, 'betterments,' &c., it is probably too high. Now the hay crop for that year—that is the grass dried and cured for use or sold—is reported at over 27,000,000 tons. This, at half the selling price in the large cities, would amount to $405,000,000, and is far greater than the aggregate home value of the cotton crop or any other crop. But the cured "hay" is but a portion of the grass crop. The other portion is used on the ground, and it requires considerable calculation to get at the value of the part so used, even in the roughest way. We can make an approach to it, however. In the first place, live stock, including horned cattle, horses, sheep, swine, &c., to the value of $1,525,000,000 were fed from it that year. Averaging the lives of these at five years, we have one-fifth of that sum as representing the grass fed to them in 1870, viz., $305,000,000; next, we find the value of the animals slaughtered for food in that year to be $399,000,000, and as this is an annual product the whole of it will, for the present, be credited to the grass crop; next, we find that the butter crop of 1870 was over 514,000,000 pounds, which at the low average of 25 cents amounts to $128,000,000, and this goes to the credit of grass; next, we have 235,000,000 gallons of milk, which averaged, at the low estimate of 10 cents a gallon, adds $25,000,000 more to the credit of the grass crop; then we have 100,000,000 pounds of wool, at 25 cents a pound, adding $25,000,000 more, and finally 53,000,000 pounds of cheese, at 10 cents, adding over $5,000,000 to the total of these credits to the grass crop of 1870, which aggregate $887,000,000. Now let us add the value of the 'hay' crop, as given above, viz., $405,000,000, and we have a grand total for 'hay' and the products of grass consumed on the ground amounting to $1,292,000,000!

This is, of course, subject to deduction, as the meat, butter, milk, cheese and wool-producing animals consume other food besides grass and hay. To make ample allowance for this, we deduct the entire value of the corn and oats crop of 1870, estimated at $270,000,000, and this leaves a remainder of $1,022,000,000 to be credited to the hay and grass crop of that year, when the reported aggregate of all farm products was $2,447,538,658. If our estimates make even the roughest approach to accuracy, the value of that crop was two-fifths of the aggregate value of all farm products, and hence we may infer that two-fifths of the capital then invested in agricultural pursuits was devoted to the grass crop, and this in the United States equals (in round numbers) $4,575,000,000!

If any other of 'the earth's products' can make a better show, we do not know where to find it."

FRYING FISH.—"Margaret," in the *Germantown Telegraph*, gives her mode of frying fish, as follows:—

"As this is the season when fresh fish is abundant and which are generally cooked by frying, let me, an old housekeeper, give a hint or two as to the mode in which the frying should be done. Put in the pan plenty of fat—and if this fat is tried from pork for the occasion, so much the better;—turn the fish as the frying goes on frequently so that no part of it shall brown, much less burn, and then you retain all the flavor of the fish and can eat it with safety as to its readily digesting. Fry with the fish several slices of breakfast bacon, commonly known as "flitch." This will give the fish additional flavor, and thus you may prefer the fish to the bacon. No fresh fish should be fried without bacon, and never will be, after a trial."

To cure dull times—apply an advertisement to the afflicted part.

The Origin of our Cultivated Fruits.

Professor Asa Gray, in his paper read before the Pomological Society, asks, "Were the fruits made for man, or did man make the fruits?" We are sure, says the *Journal of Chemistry*, that our readers will thank us for quoting his answer to the question, which is as follows:—

"These need not be taken as mutually exclusive propositions; for as 'God helps those who help themselves,' and man's work in this respect is mainly, if not wholly, in directing the course or tendency of nature, so there is a just sense in which we may say 'the art itself is nature,' by which the greatest triumphs of horticultural skill have been accomplished. Moreover, I am not one of those naturalists who would have you believe that nothing which comes by degrees, and in the course of nature, is to be attributed to divine power. The answer I should give to the question, as we thus put it, is: 1. Some fruits were given to man as they are, and he has only gathered and consumed them. But these are all minor fruits, and such as have only lately come within the reach of civilized man, or are not thought worth his trouble. Cranberries, persimmons, and papaws are examples. Whether even such fruits have or not been under a course of improvement irrespective of man, is another question. 2. Others have come to man full flavored, and nearly all that he has done has been to increase their size and abundance, or extend their season. Currants and gooseberries, raspberries and blackberries, chestnuts, and, above all, strawberries, are of this class. 3. But most of the esteemed and important fruits, as well as the grains, have not so much been given to man as made by him. The gift outright was mainly plastic, raw material, time and opportunity. As to the cereal grains, it is only of the oat that we probably know the wild original; of wheat there has been an ingenious conjecture, partly but insufficiently confirmed by experiment; of the rest, no wild stock is known which is not most likely itself an escape from cultivation. Of some of them, such especially as maize, not only can no wild original be indicated, but in all probability none exists. So of the staple fruits; of some, the wild originals can be pretty well made out; of more, they are merely conjectural; of some they are quite unknown, and perhaps long ago extinct."

THE GIFFARD PEAR.—We do not think the *Giffard* pear receives as much attention as it is entitled to, says the *Germantown Telegraph*. It is of good size, handsome form, ripens directly after the Tyson, is very much in appearance like it, and is nearly equal in flavor to that admirable pear. One thing especially in its favor is, that the tree is a free grower, and comes into bearing in about four years, and in this has a great advantage over the Tyson, which is slow in fruiting. We have a tree which in four years after setting out bore a full crop of perfect fruit. This desirable variety is to be found in most of our public nurseries.

WATERMELONS.

J. V. K. Wells, near Milford, Del., has the reputation of raising immense crops of melons of splendid size and superb quality. The editors of the *Peninsular News*, thinking it would prove acceptable to their readers, has taken the trouble to learn Mr. Well's method of culture, and presents them as follows:

"His patch contained nearly five acres, and last winter it was an old sedge field, worn out land that had been uncultivated for several years, and abandoned to sedge and persimmon bushes. It was a sandy loam soil. He cut the bushes out of it and plowed the sedge under about six inches deep early in April. With the rake-harrow it was then thoroughly pulverized and afterward laid out in squares six by eight feet. At the crossings of the rows he scooped out the earth with a hoe and put in a large shovelful of well rotted barnyard manure. This was covered with the hoe and just before planting the seed a handful of Pacific Ocean Guano was worked into the surface soil over each hill. The seed were planted about the first of May and when they were well up, strong and vigorous, he removed all but one plant in each hill. This was allowed to grow under a good cultivation with the hoe and harrow, until the vine began to set its fruit. Each vine was then prevented from setting but two melons by pinching off the blossoms, and the vines themselves were pruned by pinching in the terminal end. When these two melons had attained a size of six or eight inches in diameter, one or two more were allowed to set, and all other blossoms remorsely removed until these last ones were well advanced toward maturity. After the first two were ready for market and the second two had attained the diameter of six to eight inches, another one or two were allowed to set, and in this manner the vines were kept in bearing all the season, but at no time was any vine allowed to carry more than four melons, and in some instances but one or two. By this treatment the productive vitality of the vines was all directed to producing large sized melons. This is the only method by which the enormous melons of twenty to forty lbs. can be produced. If the vines are allowed to set all the fruit they will, the size cannot be great; but if each vine is allowed only to bear one or two melons it will have vitality sufficient to carry them to an enormous size. The variety grown by Mr. Wells are the *Gipseys*."

REMEDY FOR THE CUT-WORM IN CORN FIELDS.—As before our next number, says the *Practical Farmer*, some of our subscribers may have to plant their corn, we give them the remedy which here has always proved effective for the cut-worm, viz.: a tablespoonful of salt on the hill *after* it is planted, but *before* it is up.

"What is a more exhilarating sight," asks a Vermont paper, "to see eighteen handsome girls sliding on an ox-sled?" "Nineteen," says the experienced editor of the Boston *Post*.

The Value of Sunflowers.

We would call the attention of farmers at this time to the value of sunflowers as a crop, and enumerate some of their values and uses.

In the first place, the flowers abound in honey and furnish food for bees. The seeds contain oleaginous matter, and will yield oil at the rate of one gallon to the bushel, which is but little inferior to olive oil. One acre will produce fifty bushels of seed. It is also valuable for feed for horses and poultry. The leaves are excellent fodder for cattle.

The stalks while growing may be utilized as bean poles, where they are scarce and difficult to be obtained, and when dry may be used as roofing, or set up against a fence to form a wind-break. They contain a large amount of potash and are excellent for fire kindling. The seed has also been recommended for fuel.

The reputation of the growing sunflower to absorb miasmatic vapors, and preventing fever and ague, is well known.—*Exchange.*

A correspondent in the Journal of Industry, of Richmond, Va., writing on the subject of Sunflowers, &c., gives the following as the result of his experiments:

"Contiguous to my residence is a marsh. During the summer and fall of 1872 nearly every member of my family were down with the ague and fever. In the spring of 1873 I thought I would give the sunflower a trial, and planted a number around the yard. I do not know whether there is really any medical virtue in this curious plant, but not a case of chill occurred that season at my house, and I secured a very excellent food for my chickens. Pleased with the experiment, I shall try it more extensively this year and cultivate a patch, assured of this fact, that the seed will compensate for the trouble.

Dr. Pouchet records that the insensible transpiration of the sunflower is seventeen times as great as our own. Hales ascertained, by daily weighing it in scales, that it lost, by the transpiration of its leaves only, twenty ounces of water in the twenty-four hours.

Experiments by farmers in malarious districts might result in the confirmation of the idea that the sunflower exercises a healthful influence over miasma. Should such result ensue, it would require a long time to communicate the fact to the people, for our farmers are not, as a class, readers of agricultural papers."

The man who attempts to raise stock of any kind to make money, without availing himself of the experience of others in the line, is not a wise man. We need every bit of experience we can find, and in that of each we will see some point wherein we can be taught something. And this is as often in reading of the failure of others as in reading of of their successes.

Making a Valuable Manure.

S. J. Woolley, of Franklin Co., Ohio, writes the following to the *Germantown Telegraph*, upon the above subject:—

If the manure of our country was properly economized and applied, it would make a material difference in our crop reports and in the prosperity of our people.

Liquid manure is the most valuable, and is the kind that our farmers know the least about. It is most generally washed away by the rains and is lost, or is allowed to run away. To save this valuable liquid you must have a cistern or vat; it must be located so that it will receive the soakings and washings of your manure pile. This cistern should be made in a square shape, ten by twelve will do, and six feet deep. It is most durable and cheaply built of brick and plastered with water-lime. It may be built anywhere in the barnyard, covered with plank. You can drive over it as though it was not there. Now get all the old bones, old boots, harness, leather, &c., that you can, and place them in the bottom of your cistern, then add enough sulphuric acid to dissolve them or nearly so. This acid will cost three and a-half cents per pound. After it is dissolved it is ready to receive the washing of the manure; and after the cistern gets nearly full of manure washings and before applying it to the growing crop, you must test it with blue litmus paper. If it turns the paper red add ashes or lye until the paper remains blue. This is the cheapest and most powerful fertilizer that can be produced.

Clean Cellars and Sinks.—Now, as the warm weather is coming on, we should look to our cellars. All the vegetable matter should be removed from them, except potatoes, and they should have the sprouts rubbed off as fast as they appear. After being thoroughly cleaned of everything offensive in the vegetable or any other line, *whitewash* them with two good coats, and you will have sweet cellars and run no danger from fevers and other illnesses arising from a neglect of these matters. *Sinks* about a house which become offensive in hot weather, should also have a cleaning out, the water-course open, and all soil impregnated should be removed and used as manure. No careful farmer, no good housekeeper will allow any accumulation of filth of any kind to remain or to accumulate about the house. *Germantown Telegraph.*

When a young farmer's wife made her first boy's pants precisely the same before as behind, the father exclaimed: "Goodness! he won't know whether he's going to school or coming home."

How to make a Lawn.

A perfect lawn, so rarely seen in this country, forms one of the attractions of an English landscape, and is the admiration of all travellers.—Their moist climate has something to do with it, but we have seen lawns here with an evergreen greenness than which nothing could be finer—close, compact, velvety, (so to speak,) on walking over and almost beyond the reach of droughts. One of our well-known landscape gardeners, who has had large experience in making and ornamenting lawns, informed us recently, the two most perfect lawns in the United States, which had been both well made and well kept, were those of Charles Wheeler, of Bryan Mawr, near Philadelphi, and Jesse Tyson, near Baltimore. From our own observation, not having seen the others, we should have named the rural residence of Joel J. Baily, of Delaware county, and John J. Thompson, of Chestnut Hill. The latter embraces some 15 acres, is not merely undulating but hilly; but the sod over the whole is of marvellous evenness and compactness, no two blades of grass seeming to differ in size. Though these lawns were of course well *made* at first, they have also had that other important requisite of being well *kept*, made rich by annual top dressing, mowed frequently, and the surface water drained off at proper places.

There are three *essential* things to be performed in making a *beautiful* and *permanent* lawn, and we name them in the order of their importance: *a deep soil*, *a rich soil*, and seeding proper grasses in sufficient quantities. The first should not be *less* than 15 inches, to be accomplished by deep ploughing and subsoiling. There is no other security against the lawn being burnt brown and apparently dead during dry spells of weather to which we are always liable. This is the great preliminary step. *Previous* preparation of the soil by repeated ploughing, stirring and manuring is also very desirable, but this may not be absolutely essential if done when the lawn is being first made. Third, as regards the quantity and variety of grasses, Kentucky Blue Grass, Perennial Rye Grass a portion of Herb Grass, (*Agrostis Vulgare*,) and lastly, White Clover to make it thick and close at the bottom, are all the varieties worth planting in this country. 30 lbs. of the above to the acre is usually enough, but we have never heard of mistake in sowing too thick.

After a wooden pulley is turned and rubbed smooth, boil it for about eight minutes in olive-oil: then allow it to dry, after which it will ultimately become almost as hard as copper.

UNDERDRAINING, &c.

At a meeting of the Central Delaware Fruit Growers' Association, Mr. J. B. Gilchrist from the Committee on Agriculture submitted a report from which we extract the following, taken from the *Peninsular News*:—

Again, perhaps draining is not so necessary here as in some other parts of our country; still there are very many farms, fields, or parts of fields, that would well repay the owners to underdrain. We say *under-drain*. Open ditches are a *nuisance anywhere*, and especially here, where sassafras, briars, and all kinds of foul weeds abound. The advantages of draining are numerous. We will speak of but three: 1. The land is more easily tilled. 2. It is more productive. 3. It removes the *cause* of malarious disease. Very many who realize and acknowledge its advantages are debarred by the expense. In many places, at a distance from factories, narrow boards are being used instead of tiles, and it is said they will last almost a lifeteme. Where wood is as plenty as it is here, farmers have but little excuse for working around *unsightly* and *unhealthy* bog-holes year after year.

But it is not enough that a dry melon and clean seed-bed is prepared. The good farmer will *keep* his land in good condition. The main end with very many farmers seems to be to obtain the largest yield with the least possible expense. Cheapness in obtaining a present crop is not everything. The prudent man will have an eye to the future. He will see that, if he always takes away without adding, the richest land will sooner or later become poor and unproductive. For years and years this exhaustive system has been followed, until a large portion of the once rich and productive soils are nearly worthless; and this exhaustion has been largely aided of late years by the use of the (so-called) concentrated fertilizers, *stimulating* the land to produce large crops, but always leaving it poorer than before. Now, the man who does this is like that one in the old fable who killed the goose that laid him daily a golden egg. He thought there must be many eggs, but of course there was but one; and he found when too late that he had *foolishly destroyed* the *source* of his riches.

Preparing Bones.—J. B. Root, a successful market gardener, furnishes the *Western Farmer* an account of his mode of fitting bones for applying to his land. They are first broken coarsely with a heavy axe or sledge, and then placed in a concave block and crushed with a twenty pound weight working on a double spring pole. They are then put in thin alternating layers with manure, and the hole covered with two or three inches of soil. The layers of the crushed bones are not over half an inch thick; the layers of the stable manure about six inches. This is similar to the mode we have frequently recommended to our readers in answer to inquries.

All who advertise do not get rich, but precious few get rich without it.

Action of Potash on Potatoes, &c.

"A series of experiments made by Professor Ville, in France, show that the diseases that attack the potato, are in part the result of a deficiency in the supply of Potash in the soil. For five years in succession the Professor planted potatoes in the same soil without any fertilizer; to other plots of ground he added fertilizers that did not contain potash. In all these cases the potatoes became diseased in the month of May, while on the other plots where potash was supplied in sufficient quantity, the plants were healthy and yielded an excellent product."

According to Prof. Fernold, of the Maine Agricultural College, 1000 pounds of the ashes of the potato contain 515 pounds of potash.

These fertilizers have been used with marked effect upon Asparagus, and Peach and other fruit trees, and Tobacco.

Consumers will please bear in mind that the celebrated Agricultural Chemist Voelcker, states that Crude Kainit as a fertilizer is by no means as acceptable as compared with the results obtained by the Calcined and Ground Kainit; it is proved both theoretically and practically, that the damaging elements contained in the Crude Kainit, as for instance, the large quantity (16 to 17 per cent.) of Chloride of Magnesia, &c., if not expelled by calcination, becomes injurious to plants.—*Scribner's Magazine for March.*

The best Mode of Applying Lime.

At the Solebury Farmer's Club, held Feb. 18th, the above subject was under discussion, eliciting the following opinions. We fully agree with the plan recommended by Moses Eastburn, who said "he thought as soon after harvest as possible, was the right time to apply lime, and the place on the wheat stubble. Applied in this way it helps the grass crop, puts the ground in good condition for corn, and does not make oats ripen unevenly. Hampton Rice had obtained the most benefit from applying lime on the sod the winter before the corn was planted. Samuel H. Rice had applied from 700 to 1900 bushels per year for 40 years, on a farm of 80 acres. It had almost made his farm, but for a few years past it had not been much benefited by it. Wallace Paxson thought the man hit it who said "get it on, never mind where, but get it on." Henry Wildman had applied a handful of air slaked lime to the hill of corn after it was up, with marked benefit. He had also made a mixture consisting of 50 bushels of lime, 10 bushels of plaster and 6 bushels of salt—dissolved the salt and slaked the lime with the brine. He sowed the mixture on 12 acres of grass in the Spring, and had a fine crop on land poorly set.—*Practical Farmer.*

POTATOES AND TOBACCO.

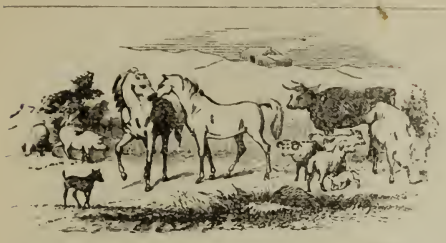
Amidst the numerous remarkable productions ushered into the Old Continent from the New World, says John Murray in his "Journal of a Naturalist" (London 1830), there are two which stand pre-eminently conspicuous from their general adoption. Unlike in their nature, both have been received as extensive blessings—the one by its nutritive power tends to support, the other by its narcotic virtues to soothe and comfort the human frame—the potato and tobacco; but very different was the favor with which these plants were viewed. The one long rejected, by the slow operation of time, and perhaps, of necessity, was at length cherished, and has become the support of millions, but nearly 120 years passed away before even a trial of its merits was attempted; whereas, the tobacco from Yucatan, in less than 70 years after the discovery, appears to have been extensively cultivated in Portugal, and is, perhaps, the most generally adopted superfluous vegetable product known; for sugar and opium are not in such common use. Luxuries, usually, are expensive pleasures, and hence confined to few; but this sedative herb, from its cheapness, is accessible to almost every one, and is the favorite indulgence of a large portion of mankind. Food and rest are the great requirements of mortal life. The potato by its starch satisfies the hunger; the tobacco by its morphia calms the turbulence of the mind. The former becomes a necessity required, the latter a gratification sought for.

No Fences.

It is stated that there are no fences in the Island of Jersey, the home of the best breed of cattle in existence, for richness of milk. A writer states that on the Island, when the cows are grazing they are tethered with a rope passing around the base of the horns with a chain and swivel attached, and are fastened to iron pegs driven in the ground. There are no fences in Germany, the foremost nation of Continental Europe—nor are there any in Belgium, as stated by travelers. Mark Twain says of France, "there are no unsightly stonewalls and never a fence of any kind" to be seen—and exclaims, "what a bewitching land it is! what a garden."

Blood as a Fertilizer.—A Milwaukee man pays three cents for the blood of each hog slaughtered by a prominent firm there, granulates it, and sells it as a fertilizer. This granulated blood resembles gun-powder, being almost black, and in fine grains.

Live Stock Register.



VARIOUS BREEDS OF CATTLE.

Comparative Richness of their Milk.

As to the influence of breed on the richness of milk we know but little. It has been so long and so confidently asserted by interested parties, that the Jersey milk is superior to all other milk in richness, that it is almost accepted by the public as a fact. It therefore occurred to me to review what information could be obtained on this subject, and give the results to the press.

In our various agricultural reports, and in items or more pretentious articles in our papers, we find statements of the yield of cows which have been selected by their owners as superior. Usually the trial extends over a short period only, and takes place during a most favorable season. We therefore expect to find maximum results, and as it is probable that the reporters are as honest in one breed as in another, we have results for the various breeds, which may be correctly comparable with each other. The first column in the following table shows the number of cows I find reported:

No.	*Breed.*	*Proportion of Butter to Milk*	*Extremes Proportion.*
7	Ayrshire,	1 : 14.70 lbs.	1 : 11.1 and 19.0 lbs.
14	Jersey,	1 : 16.93	1 : 11.99 and 21.6
3	Jersey grades,	1 : 20.46	1 : 13.7 and 27.2
15	Ayrshire "	1 : 21.39	1 : 15.3 and 25.7
21	Natives,	1 : 22.75	1 : 10.8 and 22.0
12	Durham,	1 : 23.31	1 : 17.0 and 29.5
12	Durham grd's	1 : 25.80	1 : 20.2 and 33.95

These are all the facts which I have been able to find on record, and it seems a correct series for the purposes of comparison. Our facts then would lead us to claim that selected cows of the Ayrshire breed are superior to like cows of the Jersey breed for the quality of their milk.

The native cow in the dairy regions of New York produces one lb. of butter for about 23½ lbs. of milk, as the average of a number of butter factories for several years, and this number may be considered the constant for the quality of the milk from our native cow under the circumstances of good pastoral regions and intelligent care.

This constant, 23½, or more exactly 23.37, is about 6 per cent. larger then the extreme proportion given in our table for selected native cows; could we assume that the same proposition would hold good in other cases, we would have for the average of quality of the Ayrshire milk say 20½; for the Jersey milk 23, and for the Short-Horn milk about 31 lbs. for one lb. of butter.

Let us supplement this *assumption* by a few facts relative to the percentage of cream:

Eight Jersey cows, called by Mr. Waring most extraordinary good ones, are reported by him as averaging 16.30 per cent. for the year. Eight detached reports from various sources give for the result from selected Jersey cows, at selected times, 22.5 per cent. of cream. Per contra, I have an account of an Ayrshire cow yielding 25 per cent. of cream. We have frequently had between 18 and 19 per cent. recorded from individual cows in Waushakum herd.

From sixteen Ayrshire cows, chosen without reference to their butter qualities in Scotland, I find recorded an average of 13 per cent. of cream. From all the Waushakum farm observations I deduce an average of 14.5 per cent.

The famous Jersey butter cow Lady Milton produced the first week in June, 15 lbs. butter; first week in July, 18 lbs.; first week in August, 16 lbs.; first week in September, 15 lbs. This now may be taken as a type of the largest butter producer, and it is necessary to quote largely from reports of smaller producers.

I have collected from reports in print and manuscript concerning the Ayrshire cow, statements of 16 lbs. weekly, 14⅜ lbs., 13½ lbs., 18½ lbs., 18 7-16 lbs., 14 lbs.

These figures of selected cows prove nothing of themselves. If the Jersey advocate desires to claim superior richness for the milk of this breed over other breeds, it behooves him to prove it, for the burden of proof is upon the claimant. *The few facts we have, authorize the Ayrshire cow rather than the Jersey cow to claim pre-eminence.*

The native cow has possession of the country, and although she is improved by grading upward toward the thoroughbred, as is universally acknowledged, yet the burden of proof is upon the thoroughbred breeder to show conclusively, by convincing facts, that blood is of more value than scrub parentage. If breeders of dairy cattle could persuade the farmers of our country to keep a record of the yield of their native cows, so as to obtain a correct opinion of their value, it seems to me easy to supplant the present mongrel by the more valuable thoroughbred. If breeders consult their own interest, by giving the correct yield of their herds from year to year—eschewing boastful statements

of the product from selected cows—the value of the average thoroughbred could be obtained so convincingly that, as the figures became better known, the area of market would extend, and supply could hardly keep pace with demand. To secure a ready market, it is only necessary to convince the public of the value of our wares. Were the true merits of all our breeds of cattle thoroughly known, it would be found that each locality demands a certain breed, and we would not find the breeds so mixed in one limited locality that a ride of five miles in some sections will bring to view five distinct breeds.

I trust these few remarks will show the necessity for the Jersey breeder to give the public the facts upon which his claims for this cow are based. I hope the Ayrshire breeder, now the claim for quantity has been granted, will show the *quality* of Ayrshire milk by such facts as he can give and prove. Our friends, the Durham breeders, have secured their claims for size and tendency to lay on fat. Let them also reflect that the dairy capabilities of their favorite animal also require proof, as it is extremely questionable whether the fat-producing and milk-giving functions can exist in like perfection in the same animal.

E. LEWIS STURTEVANT.

Country Gentleman.

There is no doubt in our mind of the benefit from feeding crude carbonaceous matter to swine, when they are kept in close pens. The avidity with which hogs eat rotten wood is well known. Charcoal is but another form of carbon. Bituminous coal is still another form. The utility of feeding wood and coal has long been recognized. We some years since substituted the ordinary Western stone coal with the best results, where from 200 to 500 hogs were kept in close pens and fed on the refuse of city hotels. Something of the kind seems as necessary to them as salt to strictly herbivorous animals. We have known them to consume a pound in the course of a day, and again they would not seek the coal for some time. Just what the particular use coal is in the animal economy, is not so easy to answer. Swine are especially liable to scrofulous and inflammatory diseases. Carbon, in the shape of coal, is an antiseptic, and the probability is that it acts in this way in purifying the blood.—*Western Rural.*

MILLET FOR HAY.—The *Rural New Yorker* says: Get your land in good tilth by the 15th of May to 1st of June, sow branching white millet seed at the rate of 25 to 30 pounds per acre, and cut it as soon as the seed is in the milky state. It will make excellent hay for any kind of stock, and is a good preparation for land for any kind of fall grain.

MARES AND FOALS.

Mares in foal should now be in good flesh, certainly not at all thin, and by no means weak. If bred regularly year after year they require generous keeping in order to maintain a condition of constant robust health and to produce vigorous offspring. As they generally do service in farm work they require, and perhaps deserve more care at the hands of the owner than other domestic animals, upon whose strength and vital forces there is no such demand. During at least the latter half of the period of gestation they should never under any circumstances be overtasked nor strained at a pull; and toward the close of that period they should be released from service altogether. Take off their shoes, give them the free run of a pasture, feed generously, water regularly, separate them from other stock, allow them access to shelter day and night at pleasure, and never permit them to be tied up. During stormy or cold weather it is best to confine them in loose, roomy boxes 12 by 20 feet or larger.

Thus fed and cared for, the chances of mishap or trouble of any kind to dam or offspring during parturition are very small indeed. The careful breeder, while in no manner disturbing the quiet of the mare under such circumstances, will so far keep watch of the progress of affairs as to be early apprised of any danger, and if any be seriously threatened, will have recourse to a veterinary surgeon, if one be within reach. In any event he must have the nerve to shoot every "hoss doctor" who may be caught prowling around with his "tonics," "condition powders," and other dangerous weapons, fatally bent on "assisting nature."

When the little fellow has fairly arrived, give him time enough to inflate his lungs, and gradually to get possession of his mental and physical faculties before catching him and trying to make him suck.

He is in no danger of starving for an hour or two, and many a good one has been ruined in some limb or joint by unnecessary haste or careless handling during the first thirty minutes of his conscious life. Nine times in ten more harm than good is done by any interference, unless it be immediately after the delivery, to divide the umbilical cord a few inches from the body of the foal. Should it be found that the colt is too weak to rise after an hour or two, it may be well to render him carefully the necessary assistance to enable him to suck. But this should not be attempted, especially in the case of a young mare, with her first colt, or with any nervous, high-spirited or excitable animal until it is clearly necessary to save the colt's life.—*Prairie Farmer.*

CARROT CULTURE.

L. Daniel Temple, of Hamilton, New York, correspondent of the *Midland Farmer*, gives the following on the culture of Carrots:

Carrots are raised chiefly for feeding stock, but they also form one of the most important vegetables for the table. In their wild state they are small, dry, sticky and strong flavored, but, cultivated, are large, succulent and nutritious. Regarding the qualities for feeding cattle, a correspondent of the Country Gentleman says:

"Those who wish to feed stock in a general way, with no special object beyond furnishing them with a certain amount of green, succulent food while they are on dry fodder, will raise mangold wurzels for this purpose. But the more particular farmer, who takes pride in making a choice article of butter, will have a good supply of carrots."

This I heartily indorse, and think that farmers would do better with their stock if they would provide a sufficient amount of carrots for them each season. For their growth select a light, deep, sandy loam. As farm-yard manure applied in a fresh state often induces forked and ill-shaped roots, ground which had been well manured the previous season should be chosen. It must be plowed to the depth of 12 or 15 inches, to allow the roots to grow perfectly straight. In the kitchen garden sow some early sort as soon as the ground is in working condition in spring. The main crop should not be sown until the latter part of April or forepart of May. Carrots can be successfully cultivated as a second crop after early onions. As soon as they are weeded for the last time, which will be about the first of June, seed may be sown between the alternate rows. The onions will have been harvested by the time the carrots are an inch high, leaving the ground entirely to them. If the season be favorable, they will mature a good crop. Keep the ground *perfectly* clear of weeds by a free use of the hoe; but, as a *deep* stirring might injure the roots, and cause them to grow forked, this should be avoided. When the plants are sufficiently strong, thin to eight inches apart. Carrots should be harvested in a dry time, when they will come out of the ground clean. Great care should be taken not to wound or bruise the roots. Let them lie a day in the sun to wilt a little and dry, then deposit them in small heaps, in a cool cellar, secure from frost.

Varieties—Long Orange.—This has long been the standard, not only for feeding stock, but also for the table. It possesses qualities which are not superceded by any other variety known. A variety, said to be an improvement upon them, has been offered by some of our seedsmen, but in this I think them mistaken. Undoubtedly they do better in some places than in others, but with me they have proved a failure. The Long Orange is noted for the size and uniformity of its roots, and for their deep, rich orange color. It is sure to produce a crop.

Large White Belgian.—This variety is surpassed by no other except the preceding, and by some it is even preferred, since growing, as it does, nearly one-third out of the ground, it can be harvested much more easily. The roots are pure white. On light, rich soil it grows to a great size, producing large crops.

SHEEP HUSBANDRY—DOGS.

A Mr. George Rhey, of Westmoreland County, Pa., shows the great importance of Sheep Husbandry to this country in the following article, which we copy from the *Practical Farmer*:

The area of Great Britian is 5000 square miles less than Pennsylvania, New York and Ohio. The annual product of wool there is about 260,000,000 pounds. The entire product of wool in all the United States is about 100,000,000 pounds. The annual consumption of wool in manufactures in the United States exceed the amount produced over 50,000,000 pounds, and the value of the woolen goods imported exceeds $35,000,000 each year. The relative capacity of equal areas of territory in Great Britain and the United States, to support in good thrift equal numbers of sheep, is in favor of the United States. The value of our land in comparison with that of Great Britian is almost nothing. The balance in trade against us for this article of prime necessity each year, exceeds $50,000,000. There is no description of farm stock so easily kept as sheep, provided as no other kind is, with an impenetrable covering, rendering them when kept dry and properly fed, insensible to the severest cold of the most northern limit of our country. They can be sustained in good living condition or made fat at less proportionate cost than any other description of farm stock. The flesh of sheep in nutritive and in health given qualities is equal, possibly superior, to beef.

The hide and its covering of wool, is of much greater value than that of any other animal. Their capacity for reproduction is so wonderfully great, that in a period of four years it would be possible for the farmers of the United States to rival those of Great Britain in the number of sheep and the product of wool. These facts establish so clearly the superior profits of sheep husbandry over all other branches of agriculture, that no other incentive would be needed to cause its rapid increase to a point which would enable us to export in place of import wool, were it subject to no other drawbacks.

It is unfortunately subject to a contingency which deters most persons from embarking in it, and it is driving many out of it,—the destruction of sheep by dogs. Can it be possible that an industry so essential to the prosperity, the health and comfort of the entire nation can be no longer crippled by

the dogs of the land; let us hope not. In Great Britian the owner of a dog is taxed $3. Let our Government impose a like tax and apply it to the payment of the value of all sheep injured or destroyed by dogs, and provide also that the owner of any dog shall be held liable for all damages inflicted by his dog. Our country would soon be filled with sheep, and in place of sending millions of gold out of the country to pay for the imports of wool and woolen goods, we would receive millions for our surplus.

HOLLOW HORN.—At a recent discussion at the Fulton Farmer's Club, Pa., the question was propounded—"Has any one a receipt for curing hollow horn in Cattle without boring the horn?" A Mr. King replied that the ailment of cows usually termed hollow horn, could be cured by tying a bag filled with soft soap and bran around the head but he did not believe that the horns of cattle ever became hollow. Jos. R. Blackburn, said: rub the top of the head and along the back with soft soap and brand. Mr. Reynolds said:—Fill a long slender bag with salt, soap and bran and wrap it around the head and horns. Mr. Brown expressed the belief that if cattle were fed salt-petre occasionally they would not be troubled with hollow horn.

CLOVER—WHEN TO CUT, &c.

The Worton Agricultural Club of Kent county, Md., according to "Particeps," has been discussing the following: "Which is the most profitable, to cut the second crop of clover, or to allow it to remain on the land and be plowed down for wheat?" which was decided in favor of saving the seed. The discussion seemed clearly to affirm the truth of several propositions,—

1. That clover is the most economical, efficient and most easily available fertilizer a farmer can use.

2. That the fertilizing qualities are chiefly in the roots.

3. That clover pastured early and close will not improve land, as the roots have no opportunity to grow.

4. That if a heavy growth of clover is to be plowed down for wheat the plowing should be done as early as possible, and if the plowing is to be done late a better crop of wheat will result from the entire removal of the growth of clover from the land. Instances were given of the burning off of the entire growth of clover just previous to plowing, increasing the crop materially over those parts of the same field not burned. I would condense by saying, use clover seed generously; don't pasture it until in blossom; cut the seed as early as possible, and plow at once.

USEFUL RECIPES.

CURE FOR SCAB.—The North British Agriculturist calls attention to a new sheep dip, which has been found efficient in Australia for the cure of scab and the destruction of the sheep tick: "Take 4 oz. of sulphur, 2 oz. of lime for each gallon of water. Before mixing with the water sift the dry sulphur and lime well together, then put the mixture into boiling water, and continue to boil for 20 or 30 minutes; stir while boiling; then put the liquid into the tank or dip; cool down with cold water; 2 oz. of carbonate of soda may be added to each 100 gallons. In boiling the sulphur and lime it is necessary to watch well to prevent it boiling over; to prevent this add hot water. In the Australian practice of dipping sheep the animal is kept for several minutes in the bath and the temperature is usually above 100°.

BOTS IN HORSES.—Mr. A. Keplinger, Indiana, sends up the following cure for bots in horses: Bots in horses may be known by the animals occasionally nipping at their sides, and also by red pimples rising on the inner surface of the upper lip, which may be plainly seen by turning the lip up. The cure is effected by taking two quarts new milk, one quart molasses, and giving the horse the whole amount. In fifteen minutes afterwards give two quarts warm sage tea; thirty minutes after give one pint of currier's oil, or enough to operate as physic. The cure will be complete, as the milk and molasses cause the bots to let go, the tea puckers them up, and the oil carries them entirely away. One trial will satisfy any one perfectly of its efficacy.—*Western Rural.*

FOUNDER REMEDY.—A correspondent of the *Agriculturist* says: As soon as the horse is found to be stiff, swab the legs and feet with hot water—so hot that the hand cannot bear to touch it, but not so hot as to scald. After a short time the legs should be rubbed dry and the horse gently exercised. Has never known this to fail to remedy the trouble.

LINIMENT.—The best liniment for cuts, galls, spavin, poll evil, fistula, or any other of the external diseases that animals are liable to, is made by dissolving one ounce of pulverized corrosive sublimate and one ounce of gum camphor in one pint of spirits of turpentine, put in a strong bottle. Apply with a swab.

A REMEDY FOR A HORSE THAT HAS EATEN TOO MUCH CORN—Is to give him two tablespoonfuls of salaratus dissolved in one pint of warm water being sure to see that it is all dissolved. In severe cases give a half cup full of salaratus and repeat the dose if the horse is not relieved in thirty minutes.

CHARCOAL FOR HOVEN.—There is abundance of testimony to the effect that a small quantity—half to a teacup full—of finely powdered charcoal mixed in a bottle of water and given to a bloated animal will afford speedy relief. Let it be remembered.

COLIC IN HORSES.—A "sure remedy," it is asserted, is to take a single handful of salt and rub it on the back right over the kidneys—rubbing briskly until the salt dissolves and longer, if necessary.

HOLLOW HORN.—Saltpeter, one tablespoonful; blood-root, same; both ground fine. Give it in a mush, for three mornings, if they do not lick themselves repeat the dose.

THE DAIRY.

LONG TABLE TALK ON DAIRY MATTERS.

TALK NO. IV.

WASHING BUTTER.

We will look at the processes of those who do and those who do not wash their butter.

1. In describing the system of a very successful dairyman in Western New York, L. B. Arnold states that he receives 5, 15 and 20 cents above the highest quotations in the New York city market, keeps the temperature of his milk room, so that in the hottest day the mercury never stands above 65°, and is kept from falling below 60° by a stove in winter, washes his butter with soft, cold water 50°, and does not use ice or running water: this butter is a fancy article of the best quality.

2. A writer (Fall Butter Making) in the *Country Gentleman*, giving the results of several years experience in butter making, thinks that while it hastens the removal of the buttermilk, where made in large quantities, it detracts from the sweetness of the butter, which the writer adds may be made up by the addition of an ounce of fine white sugar per pound.

3. "Some good butter makers never wash their butter at all, only in very hot weather," writes another.

4. "Don't put a drop of water on; it injures the flavor," writes one in the *Rural New Yorker*.

5. From a report of the operations of the Swedish Butter Factories, it appears the practice of washing the butter is not followed.

6. In the Massachusetts Agricultural Report, 1872, A. W. Cheever, (whose average of butter per cow per annum is over 200 lbs., which is twice the average of the whole country,) feeds grain to his cows every day, with green rye, fodder and hay, and always washes his butter in cold water as soon and as clean as possible after churning, to remove all the milk.

7. Another intelligent writer recommends the removal of the buttermilk from the churn, the pouring of water on the butter to be agitated and renewed until the water runs off clear.

8. A German paper says that a great portion of the fine flavor of fresh butter is destroyed by the usual mode of washing, and recommends a thorough kneading for the removal of the buttermilk, and a subsequent pressing in a linen cloth.

9. At a meeting of the Northwestern Dairyman's Association, J. Boies, (who makes 300 pounds of butter per cow,) stated that he washes the butter till it is free from buttermilk.

10. At same meeting, Captain Tuttle denounced the practice of washing butter as it takes away all the flavor: "people who cannot make butter without washing it had better leave it alone," he said.

11. A correspondent of the Cincinnati *Gazette*, says that washing butter drives out the milk more readily, saves labor in working with a ladle, and assists in retaining the aroma and grain of the butter.

12. F. D. Douglass, of Whitney, Vermont, one of the best of farmers, a high authority, and a practical dairyman, removed the buttermilk while the butter is still in the churn, and repeatedly adds water—ice water in warm weather—revolving butter and water together.

13. The *Home Journal* thus discusses the question:

"We approve of washing butter as it comes from the churn, that is, using so much water upon it while properly working it with the ladle or butter worker, as will remove all traces of buttermilk.—When butter comes as it should, but very little water is required to take out the buttermilk. When the moisture that flows from the butter is clear as the water that is poured upon it or is not discolored as it passes off, the washing process is completed and no more water should be used. Excessive washing injures butter and of course some judgment in the matter is necessary. We are aware that many good butter makers are opposed to washing butter, holding that some of the more delicate flavouring oils are carried off by that process, and consequently that "washed butter" has not that fine aroma which unwashed butter possesses. Possibly this may be in some instances, but as there is always danger of over-working butter and spoiling the grain in feeding it of buttermilk without the use of water, while at the same time there is danger of not expelling the buttermilk, we think it safer and better to wash it. A large majority of butter makers who make "fancy butter," wash the butter. Washed butter keeps better than that which is unwashed. This has been proved over and over again by the fancy product made under the two systems, both of which come into the London market. Butter in which there is a large proportion of caseine retained, will not keep well for any considerable length of time and a common sense view of the matter must show that washing most readily frees the butter of its caseine.

14. L. B. Arnold, of New York, of large experience and good authority in dairy matters says: "The idea that it washes out the aroma of the butter is more fanciful than real, and certainly much less injury is done to the texture by washing out the buttermilk than by working it out."

"When the butter is taken from the churn it is thoroughly washed in cool water before salting: however much washing butter may be condemned by others, it certainly works well at the creameries."

15. J. J. M., in *Journal of the Farm*, puts water with the butter in the churn to gather it, after draw-

ing off the buttermilk, finds that it saves much labor in the subsequent working and doubts that it injures the butter.

16. At the Brooks Butter Factory, Little Valley Village, Cattaraugus county, New York, water is added to the butter in the churn twice, and the butter rinsed by rocking, before it is taken out and salted.

17. Col. George E. Waring, of Ogden Farm, who gets one dollar a pound for his butter, one of the first of American authors and farmers, and a scientific and successful cattle breeder and dairyman, runs off the buttermilk from the churn, leaving the butter within and repeatedly adds water—sometimes three times—to the butter rinsing and working while in the churn, with the paddles: this "consolidates the mass and removes most of the buttermilk," in addition to this repeated washing *in* the churn, after the butter has been placed on a table for working, a large sponge, wrung out of cold water is repeatedly applied to take up any buttermilk which may remain.

18. We see one butter maker washes his butter with sweet skimmed milk, because it is not injurious to the flavor of the butter.

Here is the testimony of seventeen witnesses, eleven of whom are in favor of washing the butter with cold water, to remove the butter milk; and simply eleven to six does not show all the weight in favor of the plan: among the eleven are the best writers and dairymen in the country: Col. Waring, A. W. Cheever, J. Boies, F. D. Douglass, L. B. Arnold, E. C. Brooks and the Western New York Dairyman.

The six who do not approve of the plan are represented by only one name, Captain Tuttle, of Northwestern Dairyman's Association, the other five are anonymous communications to the agricultural press.

We think this decides the question so far as a general principle is concerned, but not necessarily and unalterably for the practice of each individual: it is supposed that those who oppose the practice as injurious to the aroma of the butter, have some good ground for their opinion, and of the course to be pursued, each individual should be governed by individual experience, following that plan which they found to give the best results: our own practice has been to work out the milk instead of washing it out: we have very cold water (51°), feed bran and turnips, get the cream at proper temperature (62°,) the butter comes hard and requires very little working: it is claimed in one section that washing butter—except in very warm weather—makes it rancid; hence the practice is not followed. *

EXPERIMENTS IN SETTING MILK.

VARIATION IN THE PERCENTAGE OF CREAM.

We quote the following from a correspondent of the Buffalo *Live Stock Journal:* "The cows experimented with were of the common stock, were stabled during the test and fed with dry hay and ten quarts of boiled oats each per day.

1—November 3. Set 95½ lbs. of milk 7 inches deep, 40 hours: result in butter, 3 lbs. 9 oz. or 26 lbs. of milk to one of butter.

2—November 4. Set 90 lbs. of milk 1½ inches deep, 36 hours, and had 5 lbs. 1 oz. butter, or 18 lbs. milk to one of butter.

3—November 5. Set 87 lbs. of milk 1 inch deep, 36 hours: got 5 lbs. 13 oz. butter, or one pound of butter from 15 lbs. of milk.

4—November 12. Set 92 pounds of milk ½ inch deep, 36 hours: had 5 lbs. 8 oz. butter: one pound of butter 17 lbs. of milk. The temperature of the milk soon ranged from 55° to 65° during the experiment."

1st. We wish to call attention to the above statement.

Was the milk in 1, placed in cold pure water 7 inches deep?

The advocates of deep setting are advocates of deep water invariably: Was water used at all in this experiment?

2nd. "The cows were fed and stabled during the test:" says the preamble: The 1st experiment, November 3—if the cows had previously been running out on scant and frosted grass exposed to the rigors of October in the inclement weather of the North, it would not be a fair test suddenly to stable and feed highly and put the first mess of milk in deep cans as a test of the system.

3d. The first test was November 3, and the result of that test is compared with the results of messes put in pans November 4th, 5th and 12th.

We have before us the result of some experiments of our own in which the percentage of cream varies in one day, in milk from the same cow three per cent: in milk from another cow, the variation, the same day, was five per cent. of cream: how much greater the variation would be likely to prove after an interval of the one, two and nine days between the first and the remaining tests!

By further reference to our experiments and tests we find, to strengthen the above suggestions, that in the milk from the same cow on different days (June 1st and 2nd,) there was a variation of *five* per cent. of cream, and in the milk of another cow the variation (June 1st and 2nd) was *ten* per cent. of cream; the variation in another cow, in milk drawn in one day, was seven per cent.

4th. The cows would be more likely to give an increased quantity of butter after their systems had been invigorated by the high feed and had grow accustomed to it (and had perhaps recovered from the unfavorable effects of a sudden change from bad to very good feed) even by the same system, mentioned in the 1, and we find that the product continued to improve at each successive test, (except the last) from 26 to 18 then to 15 pounds of milk for a pound of butter: we cannot attribute this favorable change to the different depths at which the milk was placed for reasons set forth in the third section of our remarks.

5th. We notice the range of the thermometer was from 55° to 65° during the experiments; were the forty hours mentioned in test 1, more unfavorable in consequence of heat or moistuere or other atmospheric conditions to the rising of the cream, than the 36 hours mentioned in tests 2, 3 and 4?

6th. It will be seen according to the statement, (test 3), that the best yield of butter was from milk set only one inch deep. We think the impracticability of setting milk an inch thick under proper conditions, especially in large dairies will prevent this test from having any bearing in practice. Whatever the *facts* upon which the above statement is based, we think the statement itself does not show that the results of the experiments, evince the superiority of the shallow pan, over the deep can system.

MAY TREATMENT OF COWS.

Do not turn your cattle out to grass until it gets high enough to keep them.

If you have any bottom lands, it is good policy to drain and subdue them; they make the richest and best land. but if this has not been done, they should be burned over every March, to consume the dead vegetation of the past year: when so burned they afford good and early pasture for cows before the field grasses are high enough to pasture.

Never turn your cattle on wet clover for the first time; or on dry clover for more than fifteen minutes or so the first day: they will probably eat enough to hurt them, if allowed. Before turning out every morning and every evening, give each cow a bushel of cut hay, moistened and mixed with four quarts of middlings (wheat bran 28 lbs. to the bushel,) keep an account of the product, and if it will pay to feed one peck of bran at a feed *always mixed with the moistened cut hay*, do so: remember that you get $15 worth of manure from every ton of bran you feed: there are several kinds of bran: get the right kind.

Cut your hay two inches long, to make animals chew it well and to prevent short pieces from injuring their gums.

Sow 3 bushels of oats and one of peas per acre. mixed, early, on good ground for helping out the pasture in June: drill some corn—3 bushels per acre, the latter part of May—every few days,—to feed the cattle during August and September. Three good acres thus managed will, with a very little grass to run to, keep 15 cows till cold weather: if you have never tried it you have no reason to doubt it: try it.

Make one acre rich and and plant mangold-wurtzel on it for winter feeding; put in for 1,000 bushels per acre and in the fall build a good root cellar to keep them in; and make butter all winter when you can get the best price for it: we make a mistake when we stop making butter in the winter; more work but more pay. *

WHAT IS A BLOODED HORSE?—He is a horse having more than an ordinary amount of drops or pounds of blood in his system, in proportion to the size and weight. This large amount of blood acts upon his system through a large heart, and correspondingly large arteries and veins; and put in motion, it acts in driving him to speed, the same as an inereased amount of fire under the boiler drives off a greater amount of steam, and makes the machinery go faster. This large amount of blood also acts in refining the skin, making it and the horse finer than in a horse of less blood; it refines and gives elasticity to the muscles, the feet ,etc.; it refines the entire horse, making strong the valuable parts, and fitting the whole system for speed and endurance.

THE PREVENTION OF HOG CHOLERA.—The *Rural World* says that one of the largest hog breeders in Missouri, who frequently has several hundred head at once, never has any sick. He gives them salt, just as he does other stock. In cooking food for hogs—which he does in a large wooden boiler holding thirty or forty bushels—he has the coals and ashes thrown in the boiler and boiled with the food. He also sometimes puts in salt and sulphur. His hogs eat burnt charcoal as freely as they do corn. They are shelterd from the cold and storms by movable sheds. Occasionally, he dissolves copperas (sulphate of iron) in water, and mixes it with their food. This destroys internal worms and is also a tonic. Hogs are as subject to colds and Pneumonia as human beings. The internal organs of the hog more closely resemble those of man than any other animal.

THE
MARYLAND FARMER,
A STANDARD MAGAZINE

EZRA WHITMAN,
Proprietor.
Col. S. SANDS MILLS,
Conducting Editor.
Col. W. W. W. BOWIE,
Associate Editor.

OFFICE—145 WEST PRATT STREET,
Opposite Maltby House,
BALTIMORE.
T. C. DORSEY, Business Correspondent.
D. S. CURTISS, Washington, D. C.,
Correspondent and Agent.

BALTIMORE, MAY 1, 1874.

TERMS OF SUBSCRIPTION.

One dollar and fifty cents per annum, in advance. Five copies and more, one dollar each.

TERMS OF ADVERTISING.

1 Square of 10 lines or less, each insertion	$1 50
1 Page 12 months	120 00
1 " 6 "	75 00
½ " 12 "	70 00
½ " 6 "	40 00
1 " Single insertion	20 00
Each subsequenti nsertion, not exceeding four..	15 00
½ Page, single insertion	12 00
Each subsequent insertion, not exceeding four..	8 00

Cards of 10 lines, yearly, $12. Half yearly, $7.
Collections on yearly advertisements made quarterly, in advance.

Special Contributors for 1874.

N. B. Worthington,	**John Carroll Walsh.**
Barnes Compton,	**Daniel C. Bruce,**
Dr. E. J. Henkle,	**Augustus L. Taveau.**
John Merryman,	**John Feast,**
A. M. Halsted,	**John Wilkinson.**
Ed. L. F. Hardcastle,	**John F. Wolfinger,**
D. Lawrence,	**C. K. Thomas.**
John Lee Carroll,	**Robert Sinclair.**

The Regular Monthly Meeting of the Maryland Horticultural Society, for April.

This meeting was largely attended by enthusiastic friends of the cause and the proceedings, which we elsewhere publish, were interesting and gratifying to the highest degree. Indeed, the earnest zeal and deep solicitude in the success of the Society, which was manifested, both by the original members as well as the new recruits, some of whom were from the different counties, surpassed the most sanguine expectations of the officers and Executive Committee, who have in their charge the management of the affairs of the Society.

The different speakers offered a rich intellectual feast. The paper read by Mr. Charles Reese, on "Trees and Tree Planting," was able, eloquent and elicited the deepest attention. Many brought rare, and some brought new, plants and flowers. It was an improvised *Exhibition!* a sort of surprise party.

Mr. H. C. Scott, of Prince George's, exhibited, and made free distribution, of a superior lot of Tuberose bulbs of his own growing. Mr. Rasin presented a tasty basket filled with very long cucumbers, also tomatoes and radishes, interspersed with lovely flowers. Among others who presented rare and beautiful flowers were Messrs. A. Hoen, J. Feast, A. L. Black, and the President, E. Whitman, Esq. The state of our columns are so over crowded this number that we cannot enter into that detail we could desire, but hope to do so after the next monthly meeting, when there will probably be a still larger number present, and the season being further advanced the contributions to the vegetable and floral display will be greatly increased.

The Injury to the Peach Buds.

At a meeting of the Delaware Peninsula Peach Growers, held on the 21st April, at Dover, "it was reported that in New Castle county, the buds are nearly all alive, and promise an abundant crop.—About Dover the Yellow varieties are mostly killed, but enough of the White and Red varieties remain to make a half crop. At Felton, and as far as Bridgville, about one-half the Hale's earlies are alive, while all other varieties have been killed, and below that point no varieties have escaped. Taken as a whole, the crop will be about the same as last season, with a reversal in the localities of growth. Then the shipments came from the Lower Penisula, this year they will come from the upper portion.—I have not been able to find any grower who would place his estimate from present prospect, at less than 2,000,000 baskets."

What was done by the Last Maryland Legislature to Promote Agriculture?

We deeply regret to find from the list of laws passed by State Legislature, which adjourned on the 6th of April, ultimo, that the agricultural interests, the most important of all the interests of the State and its whole population, were almost wholly neglected. Indeed, any measure proposed, tending to foster agriculture, and aid the farmers in their efforts to promote its progress, received no consideration, except by a few, very few staunch friends of this great cause. Let us for a moment see what was done. The only law which occurs to us at present was the *Dog Tax Law*. This law is of little use, inasmuch as one dog is allowed for every dwelling house, to be untaxed. On some farms of three or four hundred acres, there are a dozen dwellings, and thus a dozen dogs will be untaxed on a medium sized farm, which probably never has had at any time more than that number. This law will mostly operate on persons who keep hounds, which breed of dogs are notoriously freer from the charge of sheep-killing, than any other breed. They are usually owned by gentlemen who love the excitement of the fox-chase, and who keep their dogs well fed, and a great part of the time coupled or kenneled. The cur-dog is owned by the black and the white dwellers of tenant houses and small shanties on the farm, and it is the cur-dog that is the great destroyer of the sheep; yet a dozen or more may be kept on one farm, untaxed, under this imperfect law. This law, if we are correctly informed, is of little or no value to the farmer or sheep breeder, nothing short of a law such as some western States have enacted, will meet the wants of our people or be an effectual protection to sheep. The proper law would be, in our opinion, to tax each dog over six weeks old $2, and each slut over that age $5, and require every man who desired to keep dogs or a dog to do as the owners of stallions are required to do, take out a license every year to keep one or more dogs, paying the tax on each one. If any dog owner failed to take out license, he should be liable to a presentment, and pay a fine of fifty dollars or imprisonment in jail, at the discretion of the Court, where he was presented, one-half the money fine to go to the informer. This would save the complicated method of Constables and others, going round to investigate to whom the different dogs belonged, often to be put to his wit's end to properly charge the ownership. The amount of the tax on dogs could be devoted to Schools or objects of charity, or to the diminution of the general tax list.

This, if we mistake not, is about all that was done by the Maryland Legislature of 1874. We now refer to what they failed to do.

There was no general road law passed; no release of taxation for a number of years, on such capital as may be employed hereafter in the erection of factories of all kinds; no law passed to win by its provisions, a respectable class of immigrants from the old countries and induce the northern people to leave their inhospitable clime and seek homes in our more genial and sunny region, to utilize our water power, fill our waste places and delve in our exhaustless mines of coal and ores.

The Horticultural Society of Maryland, lately established, and calculated to do more efficacious service in the improvement of the soil, in rendering the condition of our people pecuniarily better, and in advancing the cause of agriculture generally, than any other State or county association, was refused to be admitted to the poor privilege of being under the law on a footing with either the State or County Agricultural Associations. This was splitting hairs with a vengeance, worthy of the high source that discovered the difference between tweedle dum and tweedle dee. This was done too in the face of the fact that the various sections of the State are deeply interested in horticultural pursuits, which employment and the attending interests are so rapidly increasing as to warrant the declaration, that it will rival in value to its followers and to the State in its revenues, any other interest, if it does not in a few years, (could it be fostered in its infancy,) become the chief feature in Maryland products and individual accumulation of fortunes. We may recur to this subject again. The manner in which our legislators ignore every attempt to build up the agriculture of Maryland, is offensive to the quiet yet sober-thinking tillers of the soil, and they are being aroused to the burthens under which they lie, and consequently are bording together for good, we hope and believe, provided the large portion of those Granges, Union Clubs, &c., will be firm in maintaining the principles enunciated in the platform of the Patron's of Husbandry, which its grand council put forth to the world.

Since writing thus far, we fouud in the Baltimore daily *American*, a review of the acts of the Legislature at its last session, in which is the paragraph we copy below, giving much interesting information about

THE AGRICULTURAL INTERESTS.

The agricultural interests received comparatively very little attention from the present Legislature, although the Maryland Agricultural and Mechanical Association had a deputation at Annapolis almost all the time, pressing various matters upon the attention

of the members. General George H. Steuart, the Chairman of the committee, came to be one of the most familiar objects in the lobbies, as he bustled about with a big roll of papers under his arm. The subjects on which legislation was especially desired were immigration, sheep husbandry, vagrant stock, and country roads. If it had not been for Senator Earle's scheme on the subject of immigration, the Association would probably have gotten their bill through. This bill, which was put in the care of Senator Stevens, was carried down with the ignominious defeat of Senator Earle's bill by Senator Dan Field's ruthless sarcasm. The whole subject was covered with such ridicule that General Steuart, although he labored very earnestly, could not get a bill through to have a commission appointed by the Governor, although not a dollar's worth of appropriation was asked, it being the intention of the supporters of the measure to carry it on by private enterprise, only asking from the State its official sanction. In regard to roads, a bill authorizing the County Commissioners to employ competent civil engineers for the construction and repair of roads was passed. A bill to enable sheep owners to recover damages for sheep killed or injured by dogs was not acted upon. A bill introduced by Senator Davis was passed declaring that owners of stock must keep it in their own enclosures, and enjoining officers of the law to enforce this law as other laws are enforced. The passage of the Dog law, introduced by Senator Walsh, occupied the closing hours of the session of the House. It provides that the County Commissioners shall lay an annual tax upon dogs at a rate not less than one dollar for males and two dollars for females, except in Talbot and Harford counties, where the tax shall be one dollar each. The County Commissioners shall divide their respective counties into constabulary districts, according to the number of constables, and it shall be the duty of the constables in each district to annually enumerate and assess the dogs at the rate prescribed, paying their tax collected into the County Treasury, and the official bonds of the constables shall be liable for any default. The amount collected, after deducting a commission of 25 per cent. to the constable and other expenses, shall go to the school fund. Every householder, however, shall be entitled to keep one male dog free of taxation. The County Commissioners are to furnish the constables with metal tags, with the year and the sex of the dog on them. These tags are to be worn by all dogs taxed or exempted, and if any shall be found at large off the owner's premises without a tag, it shall be the duty of the constable to kill it, and for each dog killed he shall receive fifty cents. Any person may kill any dog which may be caught killing or worrying sheep, either on his own premises or that of another. Any person maliciously removing a tag from a dog, shall be fined fifteen dollars. In case of the loss of a tag a duplicate may be furnished for ten cents, on giving satisfactory evidence of the payment of the tax. The neglect of any constable to perform the duties required, shall be sufficient cause for forfeiture of office, and the County Commissioners are directed to immediately remove for neglect. Baltimore city, Cecil, Dorchester, Wicomico, Montgomery, Allegany, Kent, Worcester and Caroline counties were exempted from the provisions of the law.

The world's memory is short. It will forget you if you do not jog it frequently.

WATER-FARMING.

We extract the following from a letter of George H. Jerome, one of the Fish Commissioners of Michigan, to the *National Granger:*

When the sea, the lake, and those unnumbered rivers and streams that bear their never-ceasing flood seaward, shall make such returns as they are capable of making the immense increase in cheap, abundant food will tend greatly to harmonize the relations of capital and labor. It is estimated that the yearly catch, consumption and value of food in these countries alone is equal to $120,000,000. Now suppose we put the fish at three cents per pound, and it will give us 4,000,000,000 pounds of food. Suppose that we estimate the weight of neat cattle at 700 pounds each, and a pound of fish to be equal to a pound of meat, and we have here as much food, all the uncostly yield of the sea, as is equal to 5,750,000 of cattle. Now to this add the yield of the whole sea, the lake, the river, the lakelet and the rivulet, and we have an amount of good brain, bone and muscle food almost beyond the range of calculation. If we except China, Japan and a small part of Europe, not a tithe of our great water-farm has yet been subjected to cultivation. Let it be cleared up, ploughed, manured, so to speak, scientifically tilled, and the choice varieties of stock introduced, and we will prove a given acreage of water to be equal in production and value to the same acreage of land. In the good time coming we may possibly hold our fairs, build our stalls, make our exhibits, wear our badges, appoint our "tasting and smelling" committees, and feel big generally, according to the fashion of the land.

STEAMED VS. DRY FEED.—At a recent meeting of the Deer Creek Farmers' Club, of Harford county, Md., "Messrs. Archer and Lee, of the Committee appointed at the January meeting to test the difference in effect between feeding cattle on steamed feed and dry, reported that one lot of cattle on steamed feed gained an average of 45 lbs. per head in 21 days, while two lots, on dry feed gained respectively an average of 95 lbs. and 106 lbs. in 46 days. Unfortunately no account was made of quantity, so that the experiment had no economic value"

An election of officers for the current year was held at same meeting which resulted as follows:—Dallas Reeve, President; James Lee, Secretary, and Thomas A. Hays, Treasurer.

The world is sure to find out an honest man; but it will find him out a great deal quicker if he advertises.

MARYLAND FARMERS' CONVENTION.

The Farmers' Convention which convened in the city of Baltimore, on the 8th of April, in compliance with a resolution passed at the February meeting of the State Agricultural and Mechanical Association, with a view of establishing the State Society as a central co-operative association for the advancement of the interests of the agricultural classes of the State, was largely attended by delegates from the various Farmers' Clubs, Unions, Granges, &c., from every section of the State, and great interest was manifested by all present.

The Hon. A. Bowie Davis, president of the State Association, called the meeting to order and stated that this Convention had been called in accordance with a series of resolutions adopted at the February meeting of the State Association. These resolutions stated that the Convention was to be held for the purpose of forming some plan by which the Maryland State Agricultural and Mechanical Association could be made the centre of all the agricultural organizations of the State. In the name of the State Society he tendered the delegates a cordial and hearty welcome. The State association, he said, had been organized for the promotion of agricultural and mechanical arts of the State; the object of the association was not only to give premiums for articles exhibited but monthly meetings were held for intellectual advancement.

On motion the meeting resolved itself into a Farmers' General Convention, whereupon Col. Edward Wilkins, of Kent county, was temporarily called to the chair, when, after expressing his thanks for the honor conferred on him, appointed the following Committee on permanent organization: Gen. Shriver, Dr. Merryman, John Merryman, Thomas Braddock and J. A. Spencer. The meeting then adjourned to Mechanic's Hall.

On reassembling Gen. Shriver, chairman of the committee on permanent organization, reported the following names as officers who were elected;

President—A. Bowie Davis, of Montgomery county. *Vice Presidents*—Edward Wilkins of Kent county, Joshua Vansant of Baltimore city, Jesse Slingluff of Baltimore county, Isaac Motter of Washington county, P. Snauffer, Jr., of Frederick county, G. S. Harris of Carroll county, Elisha J. Hall of Montgomery county, Adam R. Magraw of Cecil county, Oden Bowie of Prince George's county, Samuel Hopkins of Howard county, and E. L. F. Hardcastle of Talbot county *Secretaries*, T. B. Dorsey of Baltimore city, and Grason Scott of Harford county.

After the officers had assumed their respective stations, President Davis, addressed the Convention as follows:—

Gentlemen—I thank you for the honor you have conferred upon me in soliciting me to preside over this large and respectable meeting of Maryland Farmers. I owe it, I am sure, to the position I happen at this time to hold as President of the Maryland Agricultural and Mechanical Association. I feel that a compliment has been paid that society by my appointment, and I again return you my thanks. It seems gentlemen, that the dream of my life is about to be fulfilled. That dream has been to see the time when farmers would properly realize the importance of the relations they bear to the State and National Governments. Your assembling here to-day, and the recent agricultural movement throughout the whole country, seems to indicate that my dream will be fulfilled. We take a very limited view of the value of our agricultural associations when we suppose that their only object is to collect and distribute premiums for superior excellence in stock, cultivated crops or implements of husbandry. Valuable as these are in exciting a spirit of industry and thrift, the intellectual improvement we get from collecting facts, hearing essays and lectures, and discussing various interesting subjects, is far more important.

There is also another feature of these associations of still greater significance and importance. I allude to the certain evidence of a period of peace, quietness, good will and brotherly kindness among the people of the land where they exist. An absence of such societies distinctly indicates an era of strife, animosity and discord. I have never visited an agricultural meeting without witnessing the most cordial feeling existing among those who attend them, and it may be well as a proof of the assertion just made, to look at the progress of agricultural societies in this country. The first society we read of was formed in New York in 1795, although Pennsylvania claims to have had an organized society some years earlier. The societies of New York and Pennsylvania became generally known throughout the United States, and a few years after their organization, we hear of similar societies being formed in Massachusetts, Virginia, South Carolina, and many of the atlantic States. These societies, I believe flourished wonderfully prior to the political troubles that brought on the war with Great Britain in 1812. This war extinguished nearly all of these societies, and we do not hear of them again until a few years after peace had been declared, then we again find everything calm and serene, and in this quiet period agricultural societies sprang up in all sections of the country. Among these was the first agricultural society ever organized in Maryland. The originators were such sterling men as the Howards, the Ridgleys, the Dorseys, and other old Maryland families. This Society held its meetings at the old Four Mile Farm, on the Frederick road, near this city, and one of the original members is living in Baltimore county at the present day.

The Maryland State Agricultural Association was formed in 1847, with Mr. Calvert, of Prince George's county, as President. The present State Agricultural and Mechanical Society was granted a charter in 1866, and from the Legislature received an appropriation of $25,000, to be used in advancing the interests of the Society, purchasing suitable grounds, and erecting the necessary buildings. The appropriation was very handsome, and had it been used judiciously would have done great good. The citizens of Baltimore, however, feeling interested in the matter, wanted the State Fair grounds located somewhere near Baltimore, and Pimlico was finally selected, and, as the Association has since learned, the choice was not as good as it might have been, as the land at Pimlico was so valuable that it could not be paid for by the $25,000 appropriation, and consequently the Society fell into debt. This led the city to appropriate an additional $25,000 towards liquidating the debt, but even that was not enough, and rather than see the Society ruined in debt, a number of private citizens contributed $60 000, and, by this means, the debt was cleared off, and the grounds and buildings as they now are at Pimlico have cost nearly $140,000. I have now in a general way shown the progress of agricultural associations in Maryland, and I firmly believe that if agricultural societies, by the distribution of premiums at their annual fairs, stimulate and encourage habits of thrift and industry, and if, by their essays, lectures and monthly discussions, they give instruction and entertainment; and, if they curb strife, hatred and animosity, and develop peace, quietness and good-will among the people, they are worthy of the patronage and support of all good, wise and just men. I am sorry to say that they have not been properly appreciated for some time: but I think, with the assistance of the farmers we will yet do great good, and knowing that you are here to-day to consider this all-important topic, I again bid you welcome, and hope that every farmer in this hall who has an interest in the cause will give his views fully and candidly.

The roll of delegates was then read by the Secretary, and the following gentlemen were found to be present:

From Washington County.—Issac Motter, Dan'l Sturtsman, C. W. Humrickhouse, Philip Wingert, J. L. McAtee, Daniel Dunn, Philip Beck, David Brumbaugh, D. A. Oswald, O. J. Shifler, J. Shifler, S. S. Downin, B. A. Garlinger, Ignatius Brown, John Welty, D. Zeller, B. J. Byers, W. M. Keppler, A. Berry, Daniel Hoover, and James Findley.

From Baltimore County.—Richard Worthington, C. H. Shippley, Edward S. Choate, Martin Jean, Edward Fite, Dr. L. T. Offit, Thomas C. Worthington, Albert Fite, R. B. Choate, George F. Bailey, C. J. Hall, S. M. Rankie, R. H Pennington, James J. Given, David S. Longnecker, G. W. Gore, Thomas Craddock, Charles G. Cockie, Chas. Semme, Edward Scott, John D. Matthias, Adam Scott, Joseph Bosley, Edward Matthias, S. Parker Bosley, A. J. Gent, B. M. Hardesty, W. W. Matthias, and Samuel Sands.

The Baltimore County Farmers Union was represented by its President, Mr. S. Rankin, and J. D. Matthews, J. T. B. Dorsey, J. Sturgis Davis, E. Scott, A. Scott, J. Crowther, William Webster, Dr. M. Merryman, Joseph Bosley, and A. J. Gent. And in addition to these regular delegates, there were a large number of other members of the Union present.

From Harford County—Delegates from "Watervale Farmers Club," W. H. Waters, R. E Duval, James A. Spicer, J. H. Quinsby, W. L. Findall, Wm. G. Scott, Nathan Grafton, Wm. Warner, Joseph Parry, Wm. M. Edline, Jr., Wm. T. Watson, Morris M. Dean, John J. Dean, E. P. Amos, and Wm. Davison.

From Kent County—Col. Edward Wilkins, Samuel Vannort, William W. Stevens, John T. Skervin, Dr. Samuel Beck, Josias Ringgold, Jr., Thomas Gale, Wm. J. Rasin, Wm. T. Tomlinson, J. T. Wallis, Stephenson Constable and A. J.Reese.

From Montgomery County—Hon. A. Bowie Davis, G. J. Hall, Benjamin H. Miller, and Edward C. Gilpin.

From Frederick County—Gen. Edward Shriver, Dr. F. Schley, Calvin Page, Christopher Thomas, Col. C. H. Thomas, Colonel G. R. Dennis, Cornelius Stanley, Charles H. Keefer, John B. Snouffer, Wm. H. Falconer and E. L. Derr.

From Talbot County—Capt. E. L. F. Hardcastle.

From Queene Ann's County—Dr. William H. DeCourcey.

From Cecil County—Adam R. Magraw.

From Anne Arundel County—Gen. G. H. Steuart.

From Carroll County—Granville S. Haines, G. W. Matthews and Col. Longwell.

In addition to the above named delegates there were present individual representatives from nearly every county in the State.

At the conclusion of the calling of the delegates, on motion of Dr. Merryman, a committee of five was appointed to prepare resolutions embodying the spirit of the Convention.

Dr. Merryman, C. I. Ditty, Gen. Shriver, Captain Hardcastle, and J. A. Spicer were appointed a committee to prepare resolutions for the action of the convention. The committee retired for consultation, and during their absence brief addresses were made.

Mr. Matthews, of Carroll, said the agricultural society of his county is arranging for their fall exhibition, and the prospects were that the display would be a good one.

Mr. Hall president of the Montgomery County Agricultural Society, represented the crops in that county looking well generally, and that the agricultural society of the county was prospering.

Mr. Vannort, of Kent, represented the agricultural society of his county to be in a flourishing condition. Forty-five acres of ground had been bought, and he expected the exhibition this year to excell any previous effort.

At this point in the proceedings a telegram was received from the Hon. Geo. U. Dennis, U. S. Senator, regretting his inability to attend the convention, and expressing "his heartfelt sympathy in the cause."

The Committee on resolutions reported through Gen. Edward Shriver, the following

RESOLUTIONS.

Resolved, That agriculture, the oldest of the arts, the parent of civilization, the basis of all trades, callings and professions, the neutral ground whence political and other asperities are banished, and wherein all men can meet in peace and brotherhood, arrogates nothing in claiming for itself the first place in the estimation of statesmen, lawmakers, and the people at large.

Resolved, That so far, in this State at least, agriculture has not received that encouragement and protection to which it is justly entitled; that our laws and business customs discriminate against agricultural interests; and that the farmer, who is the stay and support of the State, has less influence upon her policy or legislation than the representatives of any other interest, public or private.

Resolved, That the time has arrived when agriculture can no longer be thus subordinated, but will assume and maintain a position second in importance, dignity and influence to no other business or profession; that to attain such a position it is only necessary for farmers to adopt the principles so successful in all other pursuits, of union and co-operation; and that, therefore, our first and principal care shall be to secure thorough systematic and active combination and co-operation of all who are interested in agricultural affairs.

Resolved, That for the purposes of securing such co-operation of chrystalizing and giving force and direction to agricultural needs and demands, of discriminating useful and practical information by interchange of experience and competitive exhibitions of farm products, live stock, machinery, &c., the establishment and maintenance of some central organization, through which local societies can consult each other, and under whose auspices large general exhibitions can be held, is indispensable.

Resolved, That in the Maryland State Agricultural and Mechanical Association, a State institution located at the commercial metropolis, we have an organization capable, with the active support which it merits, of supplying this necessity, and that we will therefore, to the best of our ability, aid and support said association by increasing the membership, the attendance at its room and exhibitions for premiums, and by cultivating an interest generally in its operations.

Resolved, That the importance of local agricultural associations, meetings frequently for comparison of views and experience and exhibition, cannot be overestimated, and the formation and maintenance of such associations in every neighborhood is most earnestly recommended.

Resolved, That the declared views and purposes of the organization known as Granges, as set forth in the published declaration of principles of the National Grange, being entirely consistent with those of agricultural societies generally, we see no reason why farmers and their friends should not be members of both, so that the advantages of both systems may be united, and a common object sought and secured by concerted and combined action, and that thus combined farmers must necessarily gain such intelligent understanding of their needs, rights and powers as will assure the attainment of all proper objects.

Resolved, That while gladly acknowledging the services of the few sincere friends of agriculture in

the Legislature recently adjourned, we regret that they were not more numerous, and that agricultural interests did not receive that consideration to which they were so justly entitled.

Resolved, That while farmers asking nothing but what commends itself to every man's sense or justice, and seeking no class or partisan legislation, are content to trust their rights and claims to any body of men fit to legislate for the general good, they feel and declare that their interests have not been duly cared for by either national or State Legislatures.

The sixth resolution, relating to Granges, elicited considerable discussion, which was participated in by Messrs. Rankin, Dr. DeCourcey, Jas. Williams and J. T. B. Dorsey, who were opposed to its passage—and by Messrs. Ditty, Hall, Gen. Shriver and others, who favored it. The vote been taken the resolutions were adopted by a large majority, which was received with applause.

Dr. Merryman offered a series of resolutions which were adopted for the appointment of a committee to consider the propriety of establishing a weekly newspaper and printing house devoted to the various interests of the agricultural people of the State; that the most feasible plan is a joint stock company, the shares to be made available to the small farmers and farm laborers; requesting the co-operation of each organization represented with the State society in securing subscriptions; the committee to confer with the proprietors of journals already established for advice, assistance, and co-operation. The appointmen of the committee was deferred.

Mr. Rankin offered a resolution, which was adopted, requesting the members of all Farmers' Clubs to become members of the State association.

After the transaction of other unimportant business the Convention, after passing a vote of thanks to the State Association, adjourned *sine die*.

Maryland Horticultural Society.

APRIL MEETING AND DISPLAY.

The monthly meeting of the Society was held on the 21st April, at the Rooms of the State Agricultural Association, in accordance with adjournment —Ezra Whitman, Esq., President in the chair—T. C. Dorsey, Secretary.

The meeting was the largest and most enthusiastic yet held by the Society, and the interest greatly heightened by the display of quite a handsome collection of plants and flowers, which were arranged in the centre of the hall. The display was in response to a resolution offered by Mr. Rasin, at the March meeting, "that the Horticulturists of the State be invited to exhibit specimens of rare plants, flowers, &c."; it was not intended as an exhibition, but simply to give interest to the meeting, and an opportunity to those who had anything choice in the way of plants and flowers to place them before the public—and the effort was a success.

Among the exhibitors were R. W. L. Rasin, A. Hoen, Ezra Whitman, A. L. Black, John Feast, H. J. Scott, of Prince Georges' county, and others. Mr. Feast's contribution was a large collection of plants and flowers from his hot-houses—they were of the choicest and improved varieties, and were greatly admired.

Mr. A. L. Black offered a beautiful selection of Geraniums, Fuschias, Pansies, &c. Mr. Rasin, contributed a basket containing cucumbers, tomatoes and radishes, intermixed with flowers, which attracted the admiration of all. Mr. Whitman placed on the table a fine collection of plants, and two lemons, very large, and grown at his own conservatory. Mr. Hoen, a beautiful collection of Heartsease. Mr. Scott, a number of very fine Tuberose bulbs. After the examination of the flowers and plants, the meeting was called to order.

On motion, the charter granted by the court was read, accepted and ordered to be entered on the records of the Society.

Mr. Saunders, from the Executive Committee, offered the revised Professional Premium List, to be offered at the First Annual Exhibition in September next, aggregating about $500, as follows:

For the best 12 greenhouse and stove plants, $12; second best, $6; for best single specimen plant (not variegated), $5; second best, $3; for best 6 variegated plants not offered in any other collection, $6; second best, $3; for best single specimen of variegated plants, $5; second best, $3; for best collection of 12 varieties of coleus and acrianthus, $6; second best, $3; for best 12 varieties colladeums, $6; second best, $3; for best 12 varieties ferns, $6; second best, $3; for best 6 varieties lycopodiums, $4; second best, $2; for best 6 varieties dracenas lycopodiums, $6; second best, $3; for best 6 varieties palms, $6; second best, $3; for best 12 succulents, $6; second best $3; for best seedling stove or green-house plant, $5; warden cases, for the best $5; for the best new plants not offered in any collection, $10; second best, $5. Geraniums—zonales, best collection of 12 varieties, $5; second best, $3; variegated best 6 varieties, $5; second best, $3; double, best 6 varieties, $5; second best, $3. Gladiolus, best 12 varieties, cut or in pots, $4; second best, $2; dahlias, best 12 in varieties, $4; second best, $2; verbenas, best 12 varieties, $3; second best, $2; roses, best 12 varieties, $3; second best, $2; annuals, best 3 trusses, each $3; second best, $2; best collection of cut flowers, filling 20 bottles, 3 spikes each, $6; second best, $3; hanging baskets, best pair, $4; best single, $2; for best collection of hardy and tender evergreens, $8; second best, $5; Rustic stand, best specimens not less than three feet high, $5; second best, $3. Ornamental vases, best collection, $5. Garden statuary, best collection, $5. Bouquet, best parlor, $3; second best, $2; bouquet, best hand, $3; second best, $2; bouquet, best bride, $3; second best, $2. Basket of cut flowers, best, $5; second best, $3. Table designs, not exceeding four feet high, best, $6; second best, $4. Best basket of fruit and flowers, $8; second best, $5. Apples, best 20 varieties, 6 specimens each, $10; second best, $5; apples best and largest collection in varieties, $10; second best, $5. Pears, best 12 varieties, 6 specimens each, $10; second best, $5; pears, best and largest collection in varieties, $10; second best, $5; best dish of $3. Peaches, best 12 varieties, 6 specimens each, $10; second best, $5; peaches, best and largest collection in varieties, $10; second best, $5. Quinces, best peck, $3. Best collection of fruits of any kind, grown by the exhibitor, $15. Grapes—Foreign, best 6 varieties, 2 bunches each, $6; second best, $3; best single specimen bunch, $3. Native, best varieties, 2 bunches each, $3; second best, $2; best collection of, $5; best seedling, first fruited, $3. Figs, best dish of $2. Vegetables—Beets, for the best 12 specimens, $2; second best, $1. Carrots, for the best 12 specimens, $2; second best, $1. Corn, best 12 specimens of garden, $2; second best, $1. Melons, best 6 specimens of musk, $2; second best, $1; best 6 specimens of water, $2; second best, $1, Lima Beans, best 2 quarts, $1. Beans (snap) best 1 peck, $2; second best, $1. Parsnip, best 12 specimens, $2. Potatoes, best half bushel, $2; second best, $1. Salsify, best 12 specimens, $1. Squash, best 6, $1. Tomato, best peck, $2; second best $1; Celery, best 6 roots, $2; second best, $1. Okre, best dish of $1. Broccoli, best 4 heads, $2; second best, $1. Cabbage, best 6 drum head, $2; best 6 Savoy, $2. Egg Plants, best 6 specimens for table use, $2; second best, $1. Onions, best peck of, $2. Turnips, best half bushel of any variety, $1. Pumpkins, best 4 specimens, $2 Cucumbers, best 12, $2. For the best and largest collection of vegetables, $6. For the best display of horticultural tools, $5.

The premiums to be offered for amateur florists will aggregate about $250, and will be prepared at some future time. The report was approved.

Mr. E. Law Rogers offered a resolution, which was adopted, appropriating $50, to be divided into small premiums, for such seedling fruits, flowers or vegetables, as may be deemed deserving of such reward by the Executive Committee.

The Secretary read a communication from James Vick, Florist and Seedsman, Rochester, New York, offering to give special premiums to any person who takes a first premium at the Annual Exhibition with flowers raised from seed procured of him, which was accepted and ordered to be placed upon the list.

An interesting letter from Thomas Meehan, Esq., Secretary of the Philadelphia Horticultural Society, was read, congratulating the Maryland Society upon its prospects of success, and invited correspondence between it and the Pennsylvania Society,

[The letter in full will be found in another column.]

On motion of Mr. John Feast the thanks of the Society was tendered Mr. Meehan for the interest and good feeling manifested by that gentleman for the success of our Society.

On motion of Mr. Oakford, the thanks of the Society was tendered to the gentlemen who contributed plants and flowers at this meeting, and that they be entered upon the records of the Society.

Mr. Charles Reese offered a preamble and series of resolutions, in regard to the wanton destruction of forest trees in the country, and asked that a committee of three gentlemen be appointed to memorialize the next Legislature, and if possible, secure the passage of an act which will give one dollar for every forest or shade tree that may be planted by any property holder along the line of the county roads or turnpikes that bound his property, and that this premium be deducted from the State tax of each individual property holder who may plant trees in such manner. Mr. Reese supported his resolutions by a lengthy address, showing the importance of preserving trees, &c., and was followed by Jesse Marden, Jr. and E. Law Rogers, on the same subject.

A. Bowie Davis, Esq., also addressed the meeting on the subject, and remarked that aside from the advantages that trees afforded in the way of shade, adornment, causing rain, &c., they could be planted as a profitable pecuniary investment. An English elm planted on his own place in Montgomery Co., of thirty years growth, had produced plank twenty-four inches in diameter.

At the close of the discussion the resolutions was adopted, and Messrs. Chas. Reese, Jesse Marden, Jr., and E. Law Rogers were named as the committee.

[In our next number we will give the preamble, resolutions and address of Mr. Reese in full.]

On motion of Mr. Rogers, an invitation was extended to the ladies, to be present at our next meeting, on the 19th of May.

On motion the Society adjourned until May 19th, instant.

ACKNOWLEDGMENT.—The Secretary of the Maryland Horticultural Society has the pleasure to acknowledge the receipt of a beautiful Chromo and Catalogue from Jas. Vick, Esq., of Rochester, N. Y.

Thomas Meehan's Letter.

GERMANTOWN, PHILA., April 16, 1874.

To President and Members of
Maryland Horticultural Society:

GENTLEMEN:

During a visit of your President to the Hall of the Pennsylvania Horticultural Society, where I had the honor of showing him through the buildings, I promised to send him a few words of encouragement in view of your efforts to found a similar Society in your State.

None but those familiar with the workings of a Society like the Pennsylvania, can have a good idea of its influence on the community. There is no part of the country where gardening in its commercial phases is better understood than about Philadelphia, where the influence of the Society is chiefly felt, and in its more immediate objects, the fostering of a taste for Horticulture as a fine art, and in all its details as a source of rational pleasure, the Pennsylvania Society has been the means of adding to the enjoyments of hundreds of thousands. Wherever it has held its meetings the Halls have been crowded, and since it has been in possession of its great building, as many as fifteen thousand persons have attended a single fall exhibition, extending over four days. The Society has chiefly directed its objects towards creating a taste for the beautiful and the excellent in those already imbued with a love for gardening, believing, and I think rightly believing, that the more commercial phases will follow of their own accord. Of the thousands who are brought by its influence to study Horticulture critically, learning by the spirit of competition all the little points essential to genuine superiority of production, there are always enough who take advantage of the lessons which the stimulation has taught, to turn their knowledge in commercial channels. It is the boast of Philadelphia to-day that many of its best vegetable and fruit growers, its most noted private gardeners, and its chief florists and nurserymen, are mainly those who have taken the warmest interest in the success of the Society. Indeed, several of the leading florists who have a very heavy capital invested in their business, and who have thus been able to exert a great influence over the popular taste, have been led to these industrial pursuits by an early membership in this institution. Maryland seems to me at this time to offer a favorable field for a successful Horticultural Society. In fruit and vegetable culture, as one of the industrial enterprises, there has been marked progress during the few past years. Its proximity on every hand to large centres renders perishable or bulky articles more worthy of attention to her than to more distant States. This fact has been self-asserted. While fruit and vegetable growing has shown a marked increase, the cereals, with which the West competes, has yearly declined, until Maryland has a much less annual product than it had ten years ago. It is of course always a wise policy to follow the drift of a natural law, and it is because I think this drift is clear to all who will examine the figures, that I think a Society like yours, which shall in a certain sense declare that "what God has joined together let no man put asunder," will have more than a usual chance of success.

But it is in the higher aims of Horticulture that your field will chiefly lie. To make two blades of grass grow where one only grew before is the object of the progressive agriculturist. The enterprising Horticulturist seeks rather as his field to make the desert blossom as the rose; and here you also have excellent material. To have the highest effects from landscape or ornamental gardening, there must of course be people of some wealth to indulge in the taste. I suspect that Baltimore and the State at large has much more of this essential feature now at command than there was here when the Pennsylvania Horticultural Society was organized. And then that there is an already widely extended taste for trees, fruits and flowers, as means for a high and refined culture is no better evinced than by the sales-book of your own prosperous nursery firms, as well as by the experience of many a noted northern firm, which looks on Maryland as a sort of happy hunting grounds.

Gentlemen, while congratulating you on what seems to me to be excellent prospects and an auspicious beginning, I would not conceal from you, that if the experience of our Society goes for anything, you will not find it all level ground on your chosen field. Men of taste and wealth on whom you feel you can rely for support, both morally and financially, will often fail you in time of need. Some who are ready enough to admit in the abstract that a live Horticultural Society exerts one of the most refining influences on society, will do nothing practically to realize the idea. Officers will sometimes be elected, whom many will regard as by no means the best selection that could be made. Exhibitors will sometimes lose a plant, or break something, or smart under some injustice, and then judges are but human, and will often, in all honesty of judgment award premiums to objects, a more critical jury would not do. In all such cases there seems to be a universal tendency to "smash the machine," and it requires cool heads and strong nerves to carry institutions through scenes like these.

An unselfish desire for the public good, however, always wins the people who have no immediate interest in the details, yet always support that from which they derive profit and instruction. No jealousies or sense of personal injuries materially interfere with the success of Horticultural Societies, where these general public benefits are persistently kept in view; a bare half dozen of your leading Horticulturists, determined to succeed, could carry the institution through all obstacles at any time. I trust I may be pardoned for these free suggestions; they are prompted by a desire to see you successful. The Society I have the honor to represent, I know desires it most cordially: and for myself individually, devoted as you know to the interest of Horticulture all over our country, I feel as much interested in your success as if I were enlisted in your ranks.

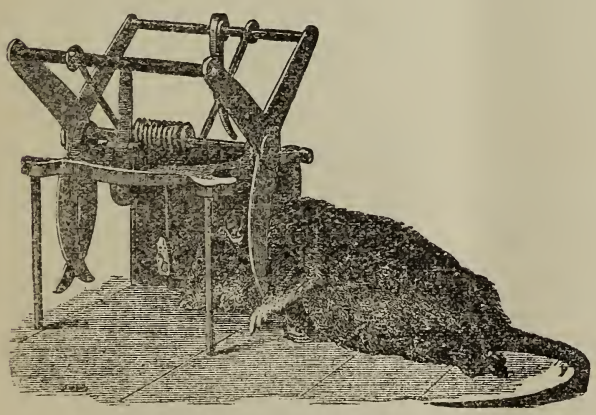
Very truly yours,

THOMAS MEEHAN.

Cor. Sec. of Penn. Horticultural Society.

MERRIMAN'S MOLE AND RAT TRAP COMBINED.

One side removed to better show position of animal when caught.



A. U., *Patapsco Neck*, Md., asks us to inform him if such a machine has been invented and where to be had. The cut we present is from B. K. Bliss & Sons' Seed Catalogue, New York, in which they say:—This has been pronounced by those who have examined and tested its merits, to be the most ingenious and practical article of the kind ever brought before the public. It is just the thing that has long been needed by those who are annoyed by those troublesome pests, ground moles. Price, $1.

HOW OLD DO MARES BREED.—Mr. M. C. Stone states, in the *Vermont Farmer*, that he had a mare that died in foal at 26 years. The dam of the famous Lexington foaled at 23 years, and a hasty examination of the American Stud Book elicits the following interesting facts: Blue Bonnet, by Hedgford, produced a foal at 24: Hannah Harris, by imp. Buzzard, at 25; Caroline, by Woodpecker, at 26; Clara Howard, by imp. Barefoot, at 27; and Katydid, by imp. Expedition, at 28.

AMERICAN TURF REGISTER AND RACING CALENDAR.—This is an indispensable work of reference to all interested in the horse. A few leisure hours devoted to its examination will enable one to keep It is a synopsis of all the running, trotting and pacposted on all the principal turf events in each year. ing events of the year, with a table of winners, table of fastest time at different distances, list of thoroughbred foals ot 1873, entries of the stakes of 1874-5, and a list of racing colors. It is published annually at $3.00 a year, and the volume containing events of 1873, is now ready. *Turf, Field and Farm*, New York City.

A Jotting of Observations Made on a Trip to Pikesville—J. Howard McHenry's Sale of Cattle, &c.

On the morning of the 8th of April, I left Baltimore, by the Western Maryland Railroad, for the purpose of attending the sale, at auction, of blooded stock advertised to be sold by J. Howard McHenry, Esq., at Sudbrook, his home farm. I had not traveled the new portion of the Western Maryland Railroad before. I found its city terminus at the western terminus of the tunnel of the Baltimore and Potomac Railroad, which point I reached by the Citizens' City Passenger line, by a very circuitous route, and over heavy grades, which of course, was tedious, but we made the connection, and made Pikesville station, at Sudbrook, in time for the sale. The Western Maryland Railroad, this new portion of it, traverses some beautiful suburban country, presenting many fine building sites; but to my great surprise, after all that has been said and published on the importance of "preserving trees," and "cultivating forests," I saw beautiful groves of valuable varieties of trees, which it had taken 80 to 100 years to grow, being felled and cut into fire-wood. All before the axe-man, small and large, were swept to the ground.

Having recectly expended hundreds of dollars for my clients, for nursery trees, for the purpose, and with the hope to produce a little shade, some time during the current quarter of a century, on lots which I was engaged in decorating, and which had been subjected to the same wanton destruction of trees as that I saw in progress, made me feel really unhappy.

How important it is that we should, by all possible means, be taught the true value of a tree.

The stock sold, consisted of about 40 head of H. B. Jersey cattle; 10 head of Devons, some 30 horses, a lot of Berkshire swine, and some doz. mules. They were principally bred by Mr. McHenry, and were very creditable to their breeder. There was a fair attendance at the sale, yet but very few buyers.

The prices realized were, in the main, very low, considering the excellent condition, reliable pedigrees and fine quality of the animals. It was a grand sight to see so many high bred, fine conditioned, cleanly, healthy, sleek specimens of the renowned Jersey family together; and as they were respectively brought into the arena, enclosed by a wall of human beings, the excitement of the beautiful, bright eyed, intelligent looking creatures, was so great, that it seemed as though their eyes would burst from their sockets.

The auctioneer's stand was on the lawn, whilst the horses were sold. They were displayed in saddle and halter, on the smooth, green turf, near which a gallery was formed by a line of carriages for the lady spectators, of whom there was a goodly number present; and the interest of the occasion was greatly augmented by their presence. When "*Dick Jackson*," that celebrated thoroughbred stallion, whose sale was limited at $1000, (not sold), left the ring, the groom gave him the length of a long driving rein, and he leaped with such agile bounds that it was more like flying than leaping, and as he turned his heels aloft, and with each successive bound rapidly increased the radius of the circle he described, (partly in the air, and partly on the turf,) the human ring correspondingly enlarged, or attempted so to do, but it being a "backward march" in "double quick," in which none seemed to have been drilled; heels over-lapped toes, and down went the ring backward, in the greatest possible confusion, mid loud shouts, laughter and exultation by those who were so fortunate as not to be "*in the ring*," in which the ladies joined with gleeful zest.

When the beautiful Jerseys were sold, the auctioneer had his stand moved to the stable court, and the ladies took theirs in the open hay-loft doors, over the stable, from which they could get an unobstructed view of the animals in the arena.

I was fortunate in getting on an elevation on one flank of the court, from which stand-point I could embrace all that was to be seen; and it was very amusing to observe how difficult it was for the flippant tounged auctioneer, with all his praises of the animals on the stand, to keep the eyes of the crowd on them, for although they were models of symmetry, sleek and bright eyed, the brighter eyes, cheerful faces and flowing locks of the fair spectators in the loft could have no rival of attraction in a mere quadruped, however perfect of its kind it may have been.

I really felt very great sympathy for the faithful auctioneer, whose back was toward the great feature of interest, as he tried by all the means that he could bring to bear, to keep the attention of his audience on earthly things, but all in vain, for they were bound to look on those above.

When the cold blooded work horses were brought out, and contrasted with those beautiful thoroughbreds, I had never before felt the force and truth so fully as I did then of the saying, "*blood will tell.*"

The day was propitious, and considering the difficulties under which the salesman labored, above intimated, he made good progress, for he sold all the stock, after giving the crowd full time to discuss the sumptuous collation set for it, which was "done up" in true Old Maryland style. Being deeply interested in all matters pertaining to the dairy, I visited the milk room, and there saw *yellow milk*, *yellower cream*, and *yellowest butter*.

The dairy was a model of neatness, and all that pertained was truly creditable to both the worthy, enterprising proprietor, and the faithful dairy-maid. "There is no use of talking," the Jerseys are the gentleman's dairy cattle, they "*cannot be beat.*" If I had but one cow, she should be a thoroughbred Jersey, and if I had a hundred they should all be ditto.

J. WILKINSON, Baltimore.

HORTICULTURE.

STRAWBERRY CULTURE.

In the culture of the Strawberry there are many methods which are approved according to the views of the grower. With most who grow for market the plan is preferred to grow them in beds, suffering them to run together in one mat. This keeps the fruit clean. As a rule the weeds are not so troublesome on this plan, as the strawberry plants crowd out many of them. There are some kinds, however, which creep like the strawberries do, and in this case the struggle for life is often a fearful one for the strawberry. Sorrel is one of these, when it takes possession of a strawberry bed, or indeed anything else for that matter, it generally conquers. Market growers seldom allow these beds to bear more than a couple of successive years, before they destroy and make new ones.

Those who want the very best fruit, grow them in hills. In this case the plants are set about twenty inches apart, and all the runners are cut off completely around the hill. Some very fine fruit can be obtained in this way. But the most approved plan for amateur gardeners is a modification of the bed and hill system. The plants are set in rows, about two feet apart, and about nine inches in the row. These are then permitted to run together, and only the runners which grow between the rows are cut away. The plants then present close rows of green foliage about nine inches or a foot wide.

In all these cases it is best to put some material between the rows, not only because it keeps the fruit from being covered by sand after heavy rains, but because it keeps the soil cool, which is a great point in successful strawberry culture. This was well known in olden times, and hence the name of the fruit, according to some historians. The late Mr. Knox, of Pittsburg, was very successful as a strawberry grower, and many people supposed his success was owing to his practice of cutting away the runners between the rows, but he filled the space between with straw, and besides this his ground sloped towards the north and west, which was all in favor of a cool condition for the roots.

In northern Maryland and southern Pennsylvania, some growers have excellent success by using corn stalks, instead of straw, between the rows. They keep the ground very cool, and the weeds do not appear to come as freely through them as through the straw. We have seen quite as good crops raised in these districts in this simple way as ever produced by the more elaborate treatment of the great Pittsburg grower.

Knots on Cherry and Plum Trees.

It often happens that trees for years healthy, will become covered with unsightly knots, which in many cases injure, and often wholly destroy the tree. It was at one time supposed that this was the work of an insect. Many believing that the Curculio, which so fatally attacks the Plum and other stone fruits, was the insect which caused the appearances. The young insect has indeed been found in them ; but this came about by the Curculio laying its egg in the soft knot when young, just as it deposits it in the fruit. It is now known that the protuberances are caused by fungoid action, how the fungus works is not known. Some believe that the seeds—spores they are scientifically called —are taken into the roots with the moisture from the soil, and that drawn into the plant system, they vegetate and develop. Others believe the spores are taken in through the bark, and grow in that way. It would be worth a good deal to know this positively, as if the latter were true, one might prevent the disease by lime and sulphur washes over the stems, as this wash is usually fatal to fungi, without injuring the bark of an ordinary tree.

Not being sure that the disease is caused in that way, no one takes the trouble to try it as a preventive on any large scale. We have seen trees in farm gardens, among the Germans of Southern and Central Pennsylvania whitewashed every year, which seemed very healthy, and free from the knot, but of course one cannot say that it was on this account that disease was prevented. It is certain that no bad results came from the practice.

We believe that after a tree becomes attacked with the knot the best practice is to cut them off and burn them as fast as they appear, and while still young. We have seen trees—old trees—so thoroughly disfigured by knots that the owner thought nothing could be done but cut them down for fire wood—thoroughly renovated by a severe pruning—cutting the tree all in heavily to the main branches. The young growth which followed was clean and free from knots for years afterwards ; and no one would know how near the tree came being sent to the wood pile.

A Few words on the Primrose Family.

Every one has some affection for old-fashioned flowers. Indeed it is because they have merit, that they continue long enough in cultivation to be old-fashioned. The merits keep them generation after generation warm in the popular heart.

The old-fashioned Polyanthus is one of these old things, which lingers with us, and though not as common as it was fifty years ago, is yet met with in most old-fashioned gardens, where sweet and lovely flowers incite the prevailing sentiment. They are of many shades of color, between yellow and crimson. How they originated is not known. It is supposed they are hybrids between the wild Primrose of the Poets, and the Oxlip of Europe. But both of these are yellow, and the various colors are not accounted for, on this supposition. The true Primroses have usually no common stem, supporting numerous small ones; but each flower has its own stalk, arising from the root stalk; while the Oxlip and Cowslip have a head of flowers borne on a strong stem, like a boquet. There are double Primroses, yellow, white and purple, but only the white seems generally known. It is in extensive use by florists, many of them rely more on this for their white color than on any other flower.

The Auricula is of the Primrose family; but is now seldom seen. In other countries, however, they are the most popular of all old-fashioned flowers.

The Chinese Primrose is the best known with us. It is in every greenhouse and window, flowering most of the winter, and also a very popular plant with boquet makers. The flowers are wired to give them longer stalks, and thus from one plant over one hundred flowers can often be separately made use of during a single season; of this there is a double white one grown, the flower of the purest white imaginable, and of course exceedingly prized by the winter boquet maker. It is rather scarce and high priced, because it can only be raised from cuttings, and not from seeds, as the single ones are. The plant makes but a half dozen shoots or so in a season, and so the stock is limited.

The Botanical collectors in foreign lands have been active among the primroses of late years, and we have now in some American gardens the Arabian Primrose, (*Primula involucrata*,) and the Japan (*P. japonica*.) The former has the leaves powdered over like the hair of the fashionable people of the last age. The flowers are of a very clear yellow, in long loose bunches, and very sweet. The Japan is of a rich plum color, with a dark crimson eye, and the clusters of flowers are rather large. In our own Rocky Mountains a beautiful species known as Dr. Parry's Primrose, was discovered a few years ago, but we believe is not yet under culture. The flowers are of the same color as the Japan primrose; but the leaves are more like an Auricula.

All of the Primrose family, except the Chinese, are hardy enough; but in our climate the trouble is to keep them alive over summer. Our atmosphere is too dry for them. Singularly enough though they live in their own country in woods, in our country there is no surer way to destroy them than to place them under the drip of trees. Those who care to take the trouble to sink a pit in the ground, so that the plants are two feet or so below the surface of the ground, with sash over them in summer, have excellent success, and they are well worth the trouble.

Summer Arrangement of Variegated Plants.

When summer comes, those who have greenhouse or window plants are anxious how best to dispose of them for the season. One of the best ways with variegated plants is to form some design with them in the open air. This kind of plants do not do well in the full sun. Partial shade not only favors their growth, but brings out their colors. Yet the drip of trees is not altogether agreeable to them. Still we have seen them do very well even in such situations; one of the most pleasant sights we saw last summer was a sort of rockery, made under some trees in front of the parlor windows, and in among the rocks were arranged the spotted and colored leaved Begonias—Coleus in various colors—Alternauthera, Achyranthes, Irisene, &c., so many beautiful varieties of which are now well known. As usually made rockeries are very tasteless affairs. They are put in places quite out of all character with the surroundings. It takes a peculiar place and peculiar plants to make a rockery look well. These variegated plants we have referred to do not look like ordinary every day plants. They have a very artificial look. One might be pardoned, knowing nothing of flowers, that the leaves had been painted. Now this artificial character harmonizes very well with the rocks, and the whole make up is very agreeable.

Large shells match particularly well with this kind of work. Many of the large oblique leaved Begonias of the character of the old Begonia Rex, have a sort of shell-like appearance, and the mixture of these shells with these plants rather increases the good effect of these peculiarly formed leaves. We are of course referring to plants in pots, which are to be set in among the arranged rocks wherever the chance offers.

THE GRAPE ROOT INSECT.

It has been stated recently that the roots of American grapes are infested with a small insect, not as large as a common green Aphis, and which the scientists call *Phylloxera*. In some cases these insects are so numerous that the vines become diseased in consequence. When vines so afflicted, are dug up, the roots are covered with galls about the size of grains of wheat. These are caused by the puncture of the insects in depositing their eggs. Most of the fibrous roots of the grape are destroyed in this way. Some Entomologists declare that the terrible failures of the grape in many parts of the Union are owing to the ravage of this pest.

In a recent issue of the report of the Department of Agriculture at Washington, Mr. William Saunders, who has had great experience as a grape grower in his time, disputes this opinion. He regards mildew as one of the great foes of vine culture, and with this the grape root insect he thinks has no connection. He is probably right, and yet wherever the roots of the vines are killed by insects, of course great injury must follow. Nothing has yet been found practicable whereby the insects may be killed and the vine saved. It is said that the Concord and Clinton grow so strong that they make roots faster than the insect can attack them, and thus they measurably escape serious injury.

THE BEST VARIETY OF STRAWBERRY.

It is remarkable that a variety so old as the Albany Seedling, or "Wilson," as it is popularly known, should hold its own so many years, in spite of numerous new introductions. Gradually, however it seems to be giving way to others. Last season the markets of Baltimore, Philadelphia and Washington, had large quantities of other kinds, and it was noted that these varying varieties were much more abundant than in former years. Among the leading kinds which, by this test are growing in popularity were Downer's Prolific, Boyden's 32 Green Prolific, Jucunda and Charles Downing, Triomphe de Gand, which for a long time seemed to contest the ground with the Wilson, was not so often seen. Still for all this the leading kind in all these three markets was the Wilson. It bears so abundantly, and grows so well generally, without being choice about the character of the soil or situation, that in spite of some deficiencies, in other respects, it will probably be in favor for some years yet.

The world is full of advertising, yet every one wants to see what is new.

SPRING AND FALL CUTTINGS.

It is not generally known that in striking cuttings there is a particular season, for each thing, and what is the proper season for propagating can only be learned by experience with each thing. This it is which makes the art of the skilful propagator. There seems to be very little science about it; anybody can strike slips or cuttings, if they will only find out the way. Thus it happens that some ladies will stick in rose slips in their window pots, or in shady places in gardens, and get them to grow without much trouble, while the best professional gardeners will often fail. So with many things which gardeners think cannot be raised from cuttings at all. Whoever, in the East, heard of striking Peach trees from cuttings, yet in California young branches put in at a certain time root readily. Then there is a general belief that the common maple will not root in this way, yet we have often seen flower stakes of maple, root in pots in windows along with the plants tied to them.

Many plants root only when the cuttings are put in in spring, while others will do only in the Fall, and some which will grow in Spring will get root more certainly and make better plants from Fall than Spring cuttings.

The Grape Vine is one of those plants which do best put in in fall, though Spring cuttings do tolerably. Currants and Gooseberries do very well in Spring. The Althœa, or as some call it the Rose of Sharon, do well only in Spring in the Middle States, though in the South they root at any season of the year.

PROPAGATING BY LAYERS.

One of the most certain and easy way to increase plants is by layers put down in the Summer time. In nurseries the Gooseberry and Quince is generally raised in that manner—and in some cases Roses that do not root well by cuttings are increased in this manner.

The Quince and the Gooseberry root cut from along the stem anywhere; and thus to get roots it is only necessary to fill earth up about the branches.

Quinces are kept as stools; that is plants kept low and made to send up many shoots; and the earth drawn in and about the shoots make nice rooted plants by Fall. The Gooseberry is done pretty much in the same way.

In many cases, however, it is not convenient to draw earth up, then the shoot has to be bent down into the ground. In the case of such plants as Gooseberries, Currants, Quinces, or some others, there is nothing more needed than to bend down

the branches; but those things which do not root readily have to be notched, and the roots then appear from the cut parts. The Moss rose, the Magnolia, and the Carnation, are all instances of plants which will not root unless treated in this way. One has to be very careful in setting the stems not to cut in too deeply.

In a Magnolia the slit is made so as to take the knife into the pith, and then upwards for about half an inch. When bending down great care is required, or the branch will break off at the point where the cut is made. The time to do this is when the young shoots are about half mature. This of course will vary in various plants. Some will be ready in July and others not until August. If good rich earth is put in about the layered branch the rooting is more rapid and more abundant.

Longevity of Trees.

The *Country Gentleman* says:—

Some of the members of the Alton Horticultural Society had an animated discussion on the life-time of orchard apple trees. Dr. Long said he was cutting up his apple trees, now 42 years old, as he thought they had reached their limit of life. Dr. Hull dissented, and did not see why they might not live 42 *thousand* years. He thought a tree properly cared for might live an indefinite number of years. Whatever may be accomplished by special management, our own observations are that apple orchards in the east rarely flourish, grow freely and bear well, over sixty years planted; and at the west they more rarely attain fifty years. This remark applies to trees under good cultivation and management, as well as to those left to take care of themselves. We have occasionally met with trees seventy years old and upwards, and the oldest tree we have seen was the famous apple tree near Peekskill, N. Y., on the farm of Henry Ward Beecher, which measured over four feet average diameter four feet from the ground, and was about a hundred years old; but these were exceptions, and the Beecher tree has since gone by the board.

All of which is true. It is not easy to see why a tree might not live 42 thousand years, but whether we see why or not, we instinctively know it will not. The same reasoning has been used in every department of Biology. Dr. Lindlay, who was a great Physiologist, and whose excellent work on the *Theory of Horticulture* was edited for us by the late A. J. Downing, held to the idea that he could not see any reasons why human life should not exist on this earth eternally. There was nothing he said by accident to determine the limit of life, nothing within the being which determined the length of its own existence. But for all this it is pretty sure that there is some limit, and the average age of an apple tree is but about fifty years.

Fuchsia Notes.

As soon as warm weather commences Fuchsias are very apt to lose their leaves. This is generally believed to be because they dislike sunny weather. In some respects this is true. The Fuchsia always does best in partial shade. But the injury to the growing leaves is more frequently owing to the attacks of the red Spider than from the influence of the Sun. These insects are so small that they can be only seen with difficulty without the aid of a pocket lens. They are generally on the under surface of the leaf, and are not often seen by amateur culturists. They will soon destroy a leaf, and when they fall from this cause the sun is very likely to get the blame.

Gardeners depend on keeping down the insect, by the frequent use of the syringe, driving the water against the leaves with as much force as possible. Sometimes when it is determined to give the plant a good cleaning, the plants are taken to the garden and laid on their sides to be syringed. In this way the operator can get a better chance at the under surface of the leaf where the little insects are.

When the flour of Sulphur is spread in the full sun, there is vapor sufficient evolved to be very disagreeable to the red Spider, and as a precaution gardeners often dust the plants with it after they have been syringed. In this way the plants keep more free from the little pest than they else would.

FRUITS FOR THE SOUTH.

L. W. Hamilton, Bartlett, Tenn., writes the *Fruit Recorder* as follows:—

I have been raising fruits for Northern markets for the past ten years and have been very successful and find it profitable if the proper varieties are planted, and the fruit handled with care.

Raising early fruits for Northern markets will always pay well, as fruits shipped from this section will reach St. Louis, Chicago and Cincinnati from three to four weeks before it ripens in those sections. Consequently it is impossible to glut the markets with early fruits.

Three years ago I shipped the proceeds from 500 Hale's early peach trees, and the first shipments brought me $12 per bushel. Bartlett pears $10 per bushel, and my strawberries averaged me 40 cents per quart last season. I have now five acres planted, and all are now looking splendid.

I will now give you a list of those varieties that have been fully tested in the vicinity of Memphis, and have been tested through this State, Arkansas, Northern Mississippi, and Northern Alabama.

Apples—Early—Early May, Red Astrachan, Red June, Summer Home, and Maiden's Blush. Winter—Carter, Sharkley, Hall's Seedling.

Pears.—Bartlett, Duchesse d'Angouleme, Flemish Beauty.

Peaches.—Hale's Early, Early Tillotson, Van Zandt's Superb, Lady Perham.

Strawberry.—Early—Downs, Ida, Burr's Pine. Medium.—Wilson's Albany. Late—Kentucky.

Of Rasbperries, Davidson's Thornless, Doolittle, Black-Cap, Mammoth Cluster, and Philadelphia for Red.

The Langstroth's Hive.

A correspondent wants information about the Hive and a Book on Bees. We do not know that he can get a better hive than *Langstroth's*, which he can make himself, now that the patent on these hives has expired. And we would advise him and every beginner in bee-keeping to buy Langstroth's "Book on Bees," in it the hives are minutely described and illustrated and directions for swarming and prevention of swarming of Bees.

ACKNOWLEDGMENT.—We received the last day of March, from that enterprising firm, Messrs. Merrill & Bros., Riverville, W. Va., the first specimen of that promological curiosity, the *Seedless Apple*. It reached us in bad order, being nearly rotten, yet preserving its shape, which is round, medium size, and good form. On cutting it open we could see no trace of seeds, and very little core, though the form of a core was distinctly marked. It is certain that in cooking, these apples require no coring, which is much gained by the cook, besides presenting a neater and plumper appearance when served as dessert than cored apples present.

Farmers! Planters! Write:—Let us have your experience in plain, intelligent terms that we may give your fellow co-workers in the progress of Agriculture, the benefit of your efforts, your thoughtful observations and conclusions. The comparison of experiments, and the interchange of sentiments elucidated by facts, are the chief means of accelerating the advancement of our great calling.

For the Maryland Farmer.

Farmer's Waste—Prince Georges County.

On a recent trip, among the farmers, in a portion of this county, I noticed a species of unwise waste by some of them.

It was this: they raked up the potato and tomato vines, together with some corn stalks and old weed stems, and threw them over the fence in piles by the road side. This is a considerable waste of manure, besides untidily littering up the highway.

About the same amount of time required to thus *throw away* that much manure would have saved it in the compost heap; while the benefit of it to the soil and increased crops would more than doubly repay the care of saving all such trash. Even burning it on the spot where raked up would have been of more value to the land than the cost of doing it, both by killing seeds and insects and supplying some ashes to the soil.

On the contrary, several of the more sensible and thrifty farmers not only saved all this litter, but added to it by raking up trash along the road-side, and leaves and pine—beards from the groves and forests—then composted them with their barn-yard, or littered their stables and hog-pens; thus, adding considerably to their valuable manure-pile; while they avoided littering the fence-corners and roadway.

Fertilizers saved in this way are worth more, in proportion to cost, than any that is bought. In former years, the writer of this has paid 50 cents a load and hauled five miles from town to farm, and made it pay a handsome per centage in the increase of yield in crops.

Maryland, nor any other farmers, are so fully supplied with manure and rich soil that they can afford to practice such waste.

At Forestville I had the pleasure of visiting the new and thrifty Grange, in that section, composed of some of the most intelligent and temperate farmers with their wives and daughters, to be found in the county.

Wheat and grass are very generally looking well, and give good promise; but the cold snap has destroyed much of the fruits, which had budded and blossomed early—more particularly the peaches and cherries, and even some of the pears.

On many plantations, the Spring work has already progressed to considerable extent. We could see that underdraining and deep plowing are much needed in portions of this section.

LAND MARK.

April 6th, 1874.

A sign-board can't tell everything.—It takes an advertisement to do that.

LADIES DEPARTMENT.

A CHAT WITH THE LADIES FOR MAY.

BY PATUXENT PLANTER.

"May, sweet May, again is come.
May, that frees the land from gloom;
Children, children, up and see
All her stories of jollity!
* * * * * * * * * * *
Hill and dale are May's own treasure,
Youths, rejoice! In sportive measures
Sing ye! join the chorus gay!
Hail this merry, merry MAY."

When May comes the herald of summer, with her bright and joyous countenance, bringing fresh grass and lovely flowers; every hue of green to decorate the trees; birds of the most brilliant plumage, or of hues as subdued as Quakeresses, to please the eye and delight the ear with the melody that awakes every grove, and all is joyous and hap.y, most people are disposed to sing in unison with the birds the praises, and in heart rejoice with the silent flowers, over the beauties of Spring and Summer. But to me, there is something sad amidst this renewal of life—it seems to tell forcibly that, "all that is bright must fade," and it is not a pleasant reflection to one who has lived more than a half century and been tortured by the loss of those, who living were his heart-treasures; now dead, are enshrined in his heart of hearts, and who like the flowers, were beautiful and attractive for a short season, but fell soon like autumn leaves touched with frost. Therefore it is, to my mind, sad to know, that in a few days or months, this mass of flowers – this wealth of floral beauty will wither and be lost; these merry feathered songsters will have departed, and the sombre hue of winter will take the place of sprinkling Spring and gushing, lusty Summer.

"How shall I meet thee, Summer, wont to fill
My heart with gladness, when thy pleasant tide
First came, and on each coombs romantic side
Was heard the distant Cuckoo's hollow bill?
Fresh flowers shall fringe the wild brink of the stream,
As with the song of joyance and of hope;
The hedge-rows shall ring loud, and on the slope
The poplars sparkle—on the transient beam
The shrubs and laurels which I love to tend,
Thinking their May-tide fragrace might delight,
With many a peaceful charm, thee, my best friend,
Shall put forth their green shoot, and cheer the sight!
But I shall mark their hues with sickening eyes,
And weep for her who in the cold grave lies."

You will find enough to occupy your whole attention ladies, this sweet month, in the flower garden. Sowing seeds, transplanting, trimming and keeping the earth well stirred and light about the plants. Your bees will require some attention, and you can begin to withdraw the boxes as they become filled with honey. The dairy will be likely to interest you and occupy more time as the quantity of milk increases. The poultry yard is or ought to be lively with a crowd of noisy denizens. The young things should not be allowed to be beyond a dry shelter during rains and in stormy chilly weather. Avoid also their running in the dew. This is a trying month on young poultry, particularly turkies.

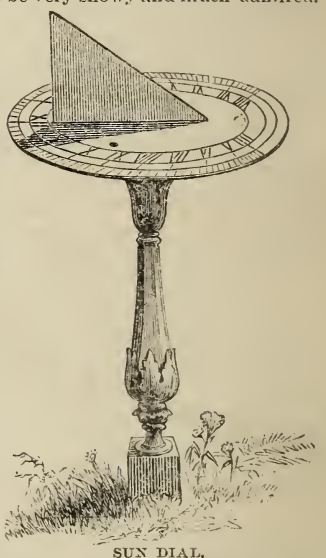
In the flower-line, they are some novelties which might as well be looked up, such as the "Improved Foliage Beet," good for table use and as ornamental as the Coleus. *Hybrid Begonias* have been of late years introduced and are very popular. Dr. Gray has christened the new gorgeous golden columbine, "*Aquilegia Chrysantha.*" Mr. Lee of Hammersmith, is raising a new variety of violets, whose petals are flat, like pansies, and he hopes to variegate the colors, without losing any of its sweet perfume. The French congress of Rose Growers have decided that, of the fifty new seedling Roses presented for examination, the best were *Captain Christy* and *Madame Vangert*, hybrid perpetuals; two teas, *Shirley Hibbard*, somewhat like *Saffrano*, and *Marie Guillot*, pure white and large.

The flower garden and lawn is never complete without some ornaments beside flowers and shrubs and trees There are many beautiful articles now made of rustic work, vases, stumps, seats &c., and iron or stone or china vases ,&c., all comparatively cheap.—

Also "*Vick's Portable Lawn Tents,*" which are very ornamental and useful, on the lawn and croquet ground. The canvass is six feet long and five feet wide, forming a complete protection against sun and rain; easily raised or lowered by a cord attached to the roller, and when drawn up is protected by metal covering on top from rain and dew—cost $25. Tents somewhat similar to this is seen in almost every respectable lawn, in England.

Among the *new* ornamental foliage plants, Miller and Hayes, Germantown, have introduced the *Coleus, Nellie Grant*, more beautiful and attractive than others of the same class, such as the much admired Queen Victoria and Golden gem. Peter Henderson of New York has also introduced a new Coleus, the "Shah," is said to be very showy and much admired.

In the ornamentation of the garden the Sun-dial should always be found. It was in use in all well appointed gardens many years B.C. and is found now in gardens of high culture as a useful ornament. The great Horticulturist & landscape gardener, Mr. Downing, inscribed on his the beautiful motto, *Horas non numero, nisi serenas;* which translates "no hours are numbered unless they are sunny."



SUN DIAL.

A writer in the New York *Independent*, in an Essay on Sun-dials, says:

It is quite customary to inscribe some sort of motto on the dial-plate. Of these we give a few examples: The proprietor of one of the finest country-seats on the Hudson (Wodenethe) sends us the following: "*Pereunt, et imputantur;*" which may be freely rendered: "The hours are passing away and are reckoned against us." Another common and not very significant one is: "Time rides upon the dial's point," A neighbor and friend has just copied the